

**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 **0.10 g/210L Quality Assurance solution**

Batch number **03003**

Date: 1/8/2003

Preparation: 28.9 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	0.126	0.129	0.126									
2	0.126	0.130	0.127									
3	0.126	0.129	0.127									
4	0.126	0.129	0.127									
5	0.126	0.129	0.128									
Ctrl	0.099	0.103	0.101									

**External Control:**

Lot #: A021986 Exp date: 01/05

Target concentration: 0.10 g/100mL

**Statistics:**

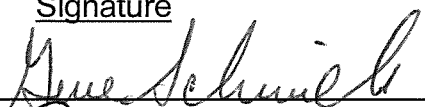

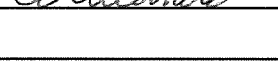
Avg. solution concent.: 0.1274 g/100 mL

SD: 0.00145

Range (3xSD): 0.1230 to 0.1318

Precision CV (%): 1.1413 %

**Equivalent vapor concent.:** 0.1036 g/210L

Analyst	Name	Signature	Date
1	Eugene Schwilke		01/10/03
2	Jayne Thatcher		01/08/03
3	Estuardo J. Miranda		01/11/03
4			
5			
6			
7			
8			
9			
10			
11			
12			

Prepared by: 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

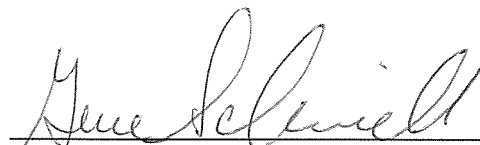
I, Eugene W. Schwilke, do certify under penalty of perjury that:

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 03003 was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.1274 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

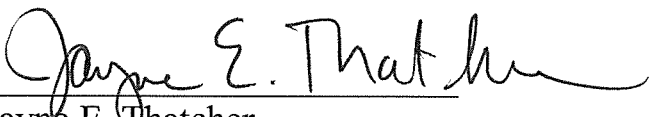
I, Jayne E. Thatcher, do certify under penalty of perjury as follows:

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 03003, was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.1274 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 03003 was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of alcohol was 0.1274 grams per 100mL.

Dated: 1/13/03  
Seattle, WA

Estuardo J. Miranda  
Forensic Toxicologist

EM/nf  
EMQA

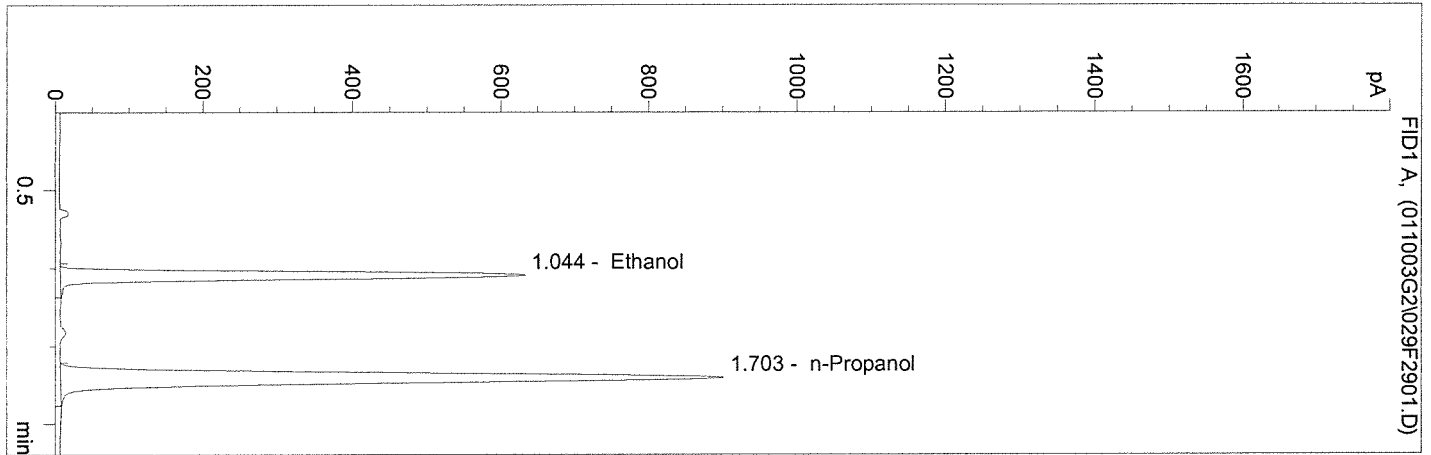


WASHINGTON STATE TOXICOLOGY LABORATORY

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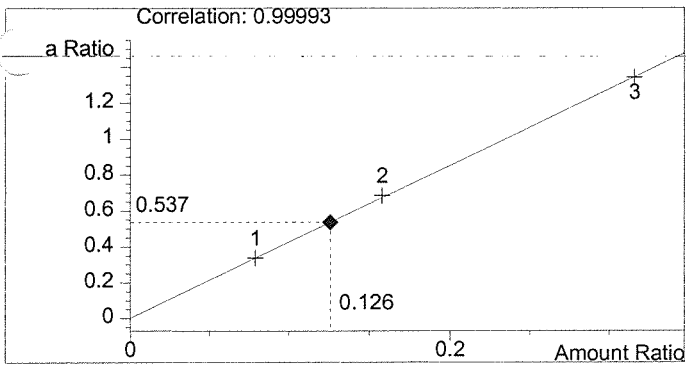
0.10QASOL 03003  
 GENE SCHWILKE

vial # 29

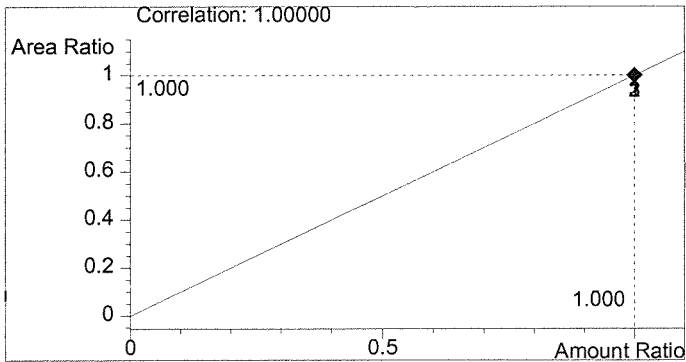


#	Compound	Area	RT
1	Ethanol	2089	1.044
2	n-Propanol	3890	1.703

Totals:



Ethanol 0.126 g/100ml



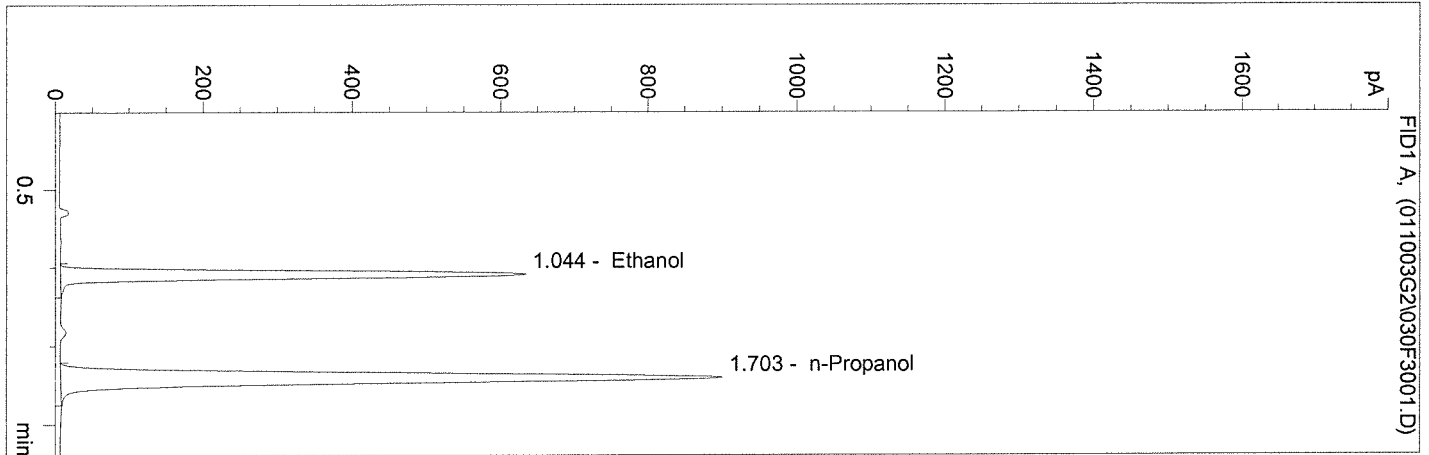
n-Propanol 1.000 g/100ml

WASHINGTON STATE TOXICOLOGY LABORATORY

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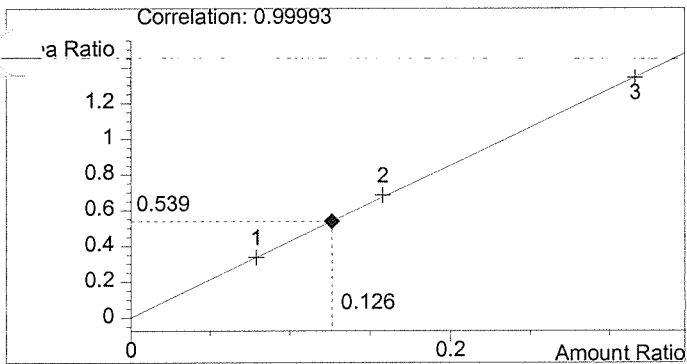
0.10QASOL 03003  
 GENE SCHWILKE

vial # 30

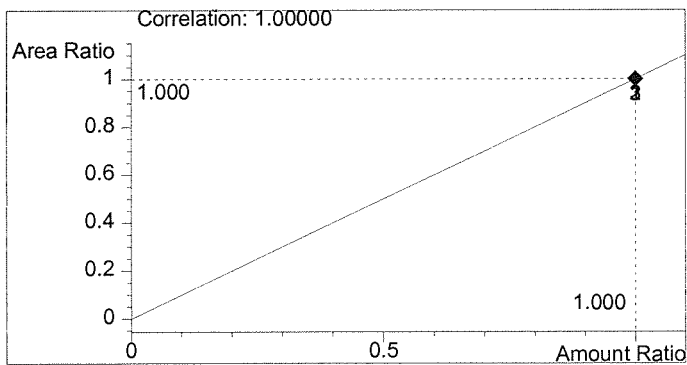


#	Compound	Area	RT
1	Ethanol	2093	1.044
2	n-Propanol	3885	1.703

Totals:



Ethanol 0.126 g/100ml



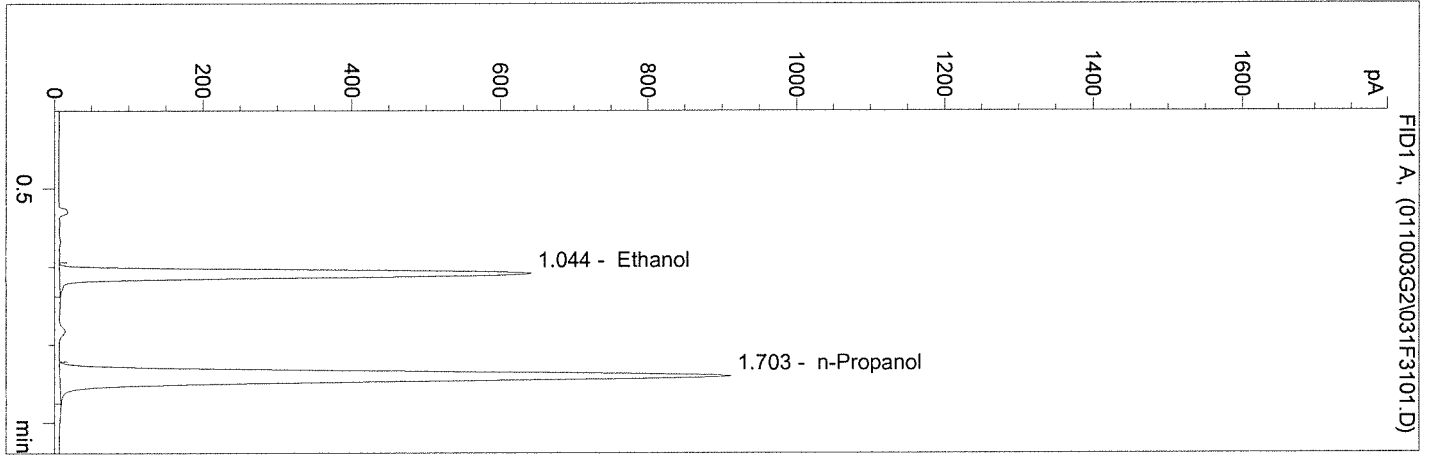
n-Propanol 1.000 g/100ml

WASHINGTON STATE TOXICOLOGY LABORATORY

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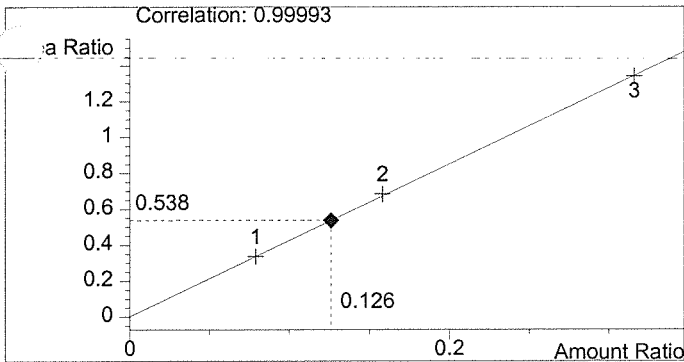
0.10QASOL 03003  
 GENE SCHWILKE

vial # 31

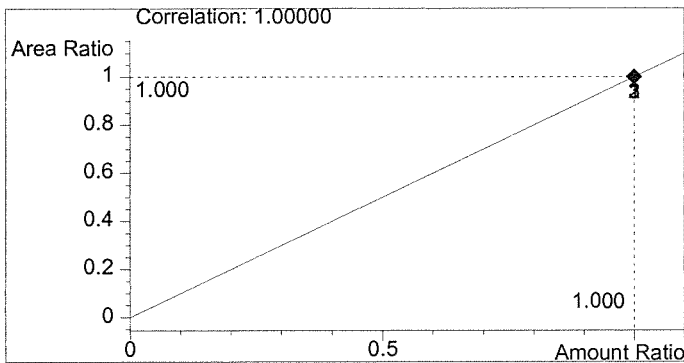


#	Compound	Area	RT
1	Ethanol	2118	1.044
2	n-Propanol	3934	1.703

Totals:



Ethanol 0.126 g/100ml



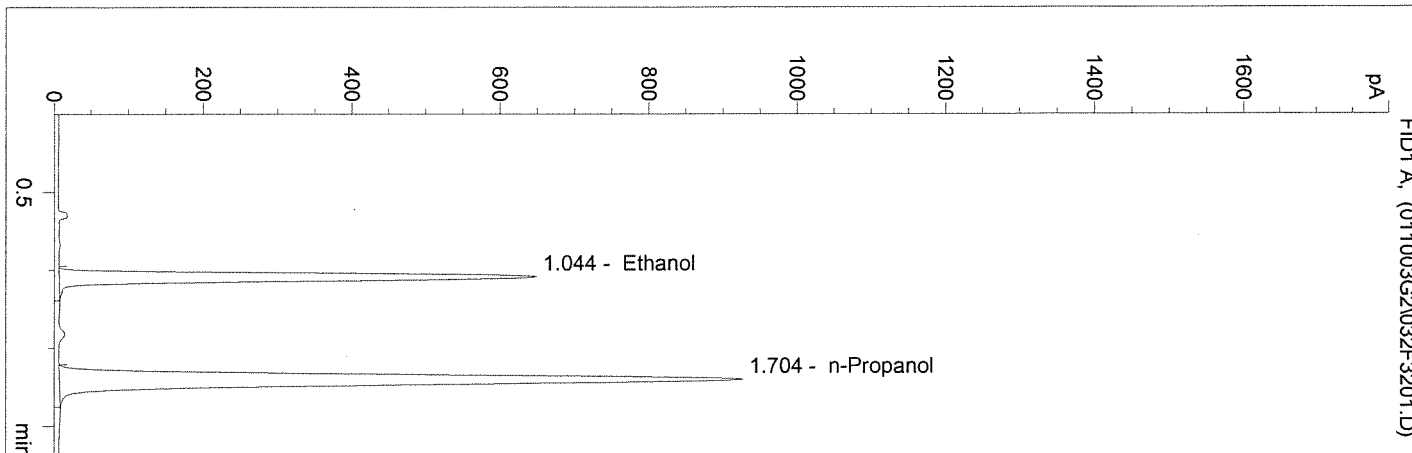
n-Propanol 1.000 g/100ml

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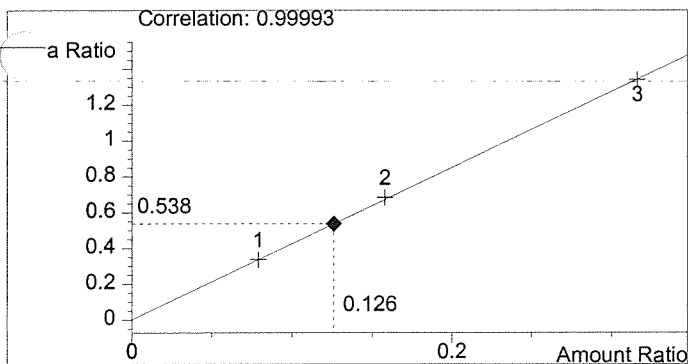
0.10QASOL 03003  
 GENE SCHWILKE

vial # 32

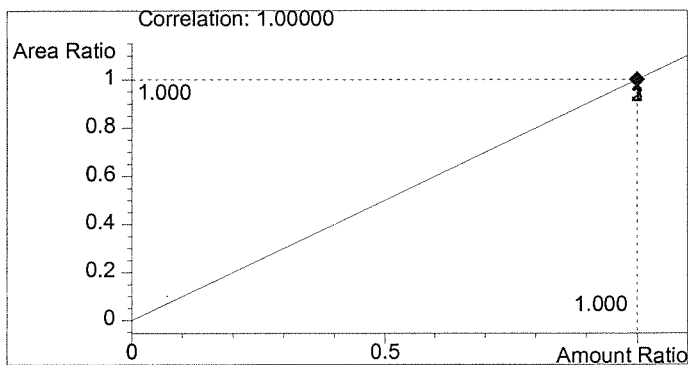


#	Compound	Area	RT
1	Ethanol	2157	1.044
2	n-Propanol	4008	1.704

Totals:



Ethanol 0.126 g/100ml



n-Propanol 1.000 g/100ml

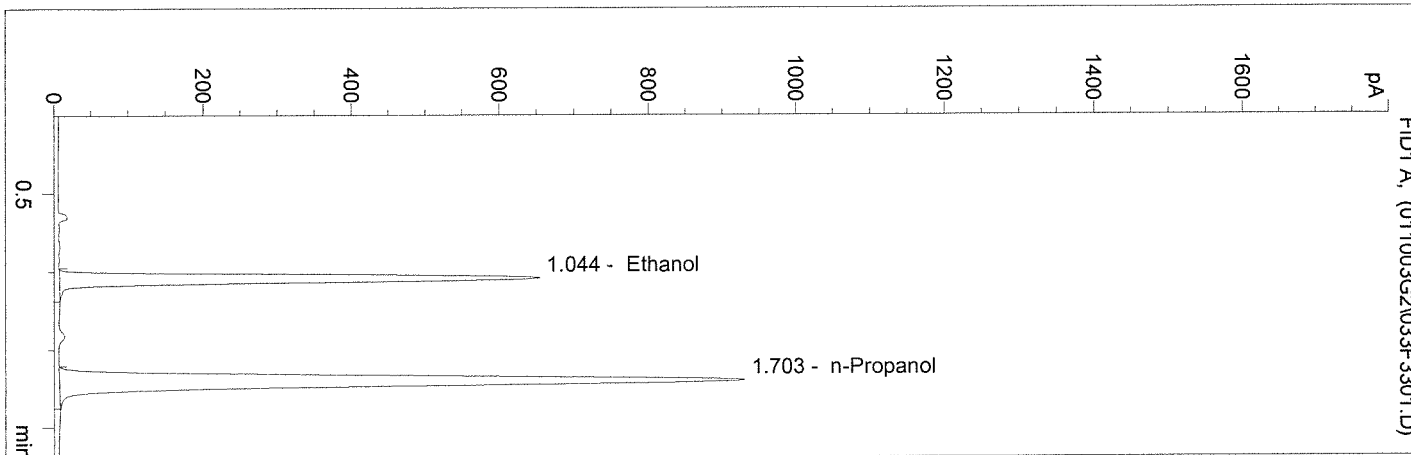


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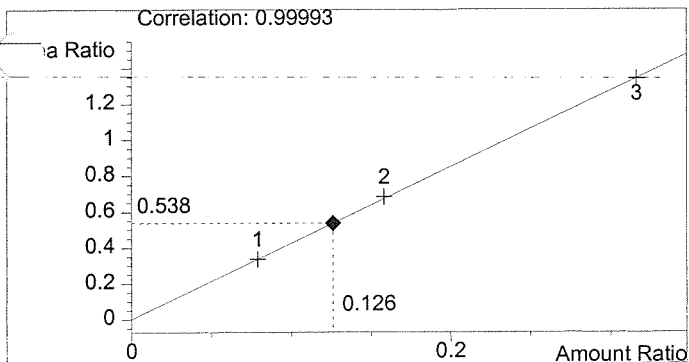
0.10QASOL 03003  
 GENE SCHWILKE

vial # 33

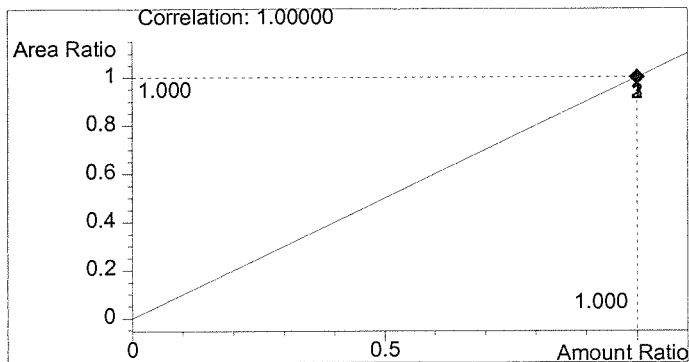


#	Compound	Area	RT
1	Ethanol	2168	1.044
2	n-Propanol	4032	1.703

Totals:



Ethanol 0.126 g/100ml



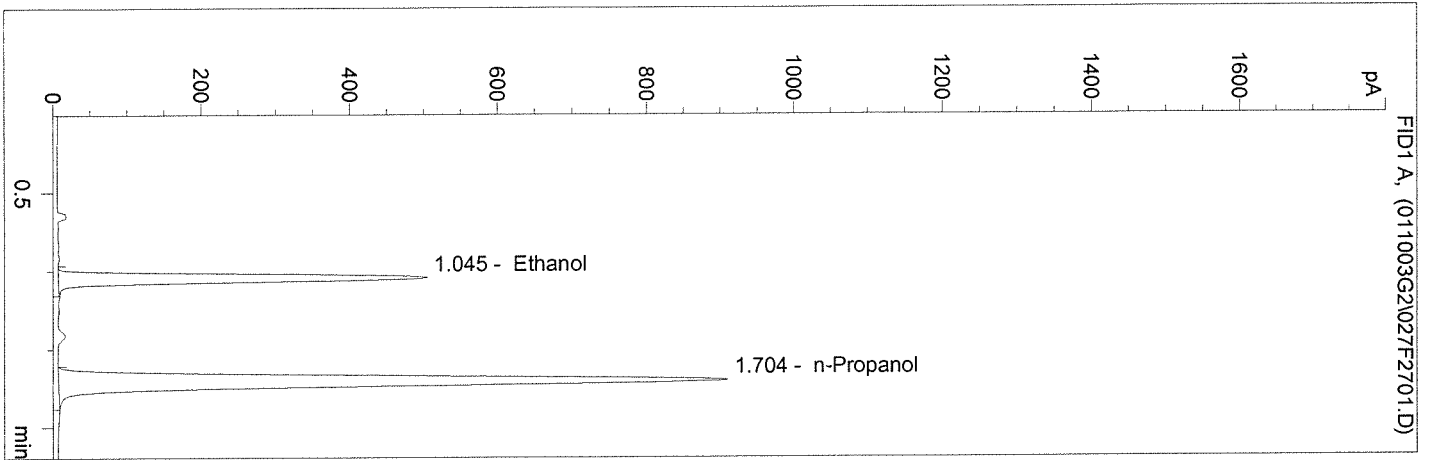
n-Propanol 1.000 g/100ml

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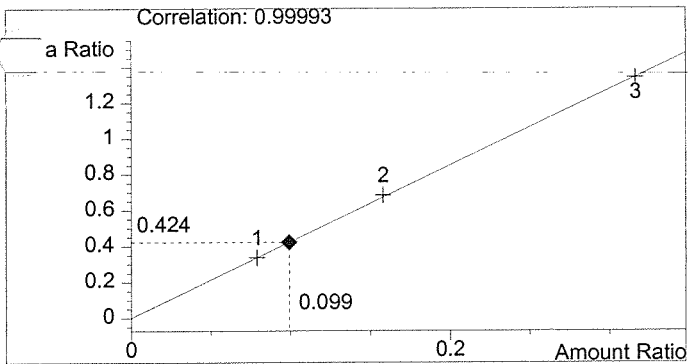
CAP 0.100  
 GENE SCHWILKE

vial # 27

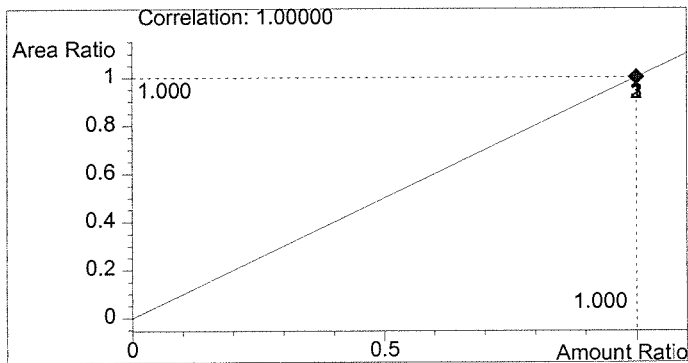


#	Compound	Area	RT
1	Ethanol	1663	1.045
2	n-Propanol	3925	1.704

Totals:



Ethanol 0.099 g/100ml



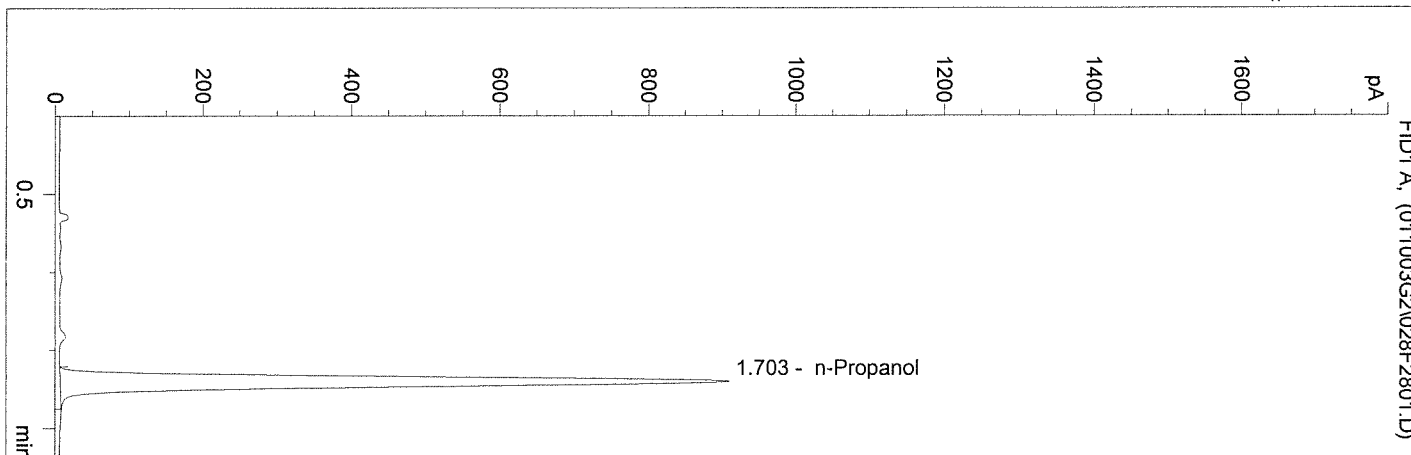
n-Propanol 1.000 g/100ml

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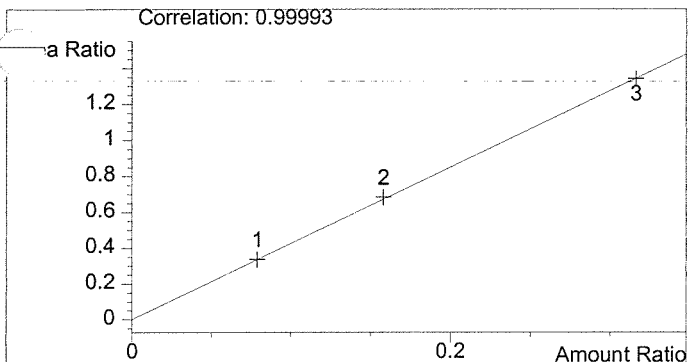
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 GENE SCHWILKE

vial # 28

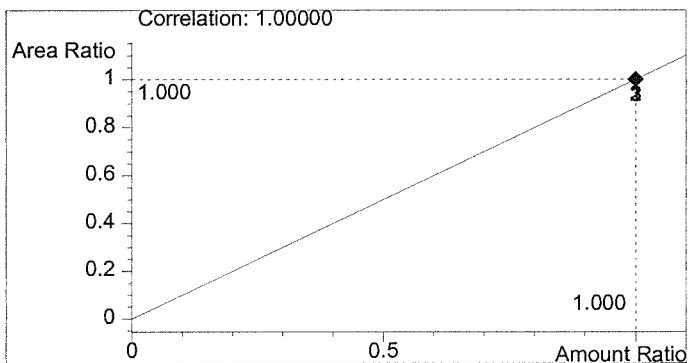


#	Compound	Area	RT
1	Ethanol	0	0.000
2	n-Propanol	3933	1.703

Totals:



Ethanol 0.000 g/100ml

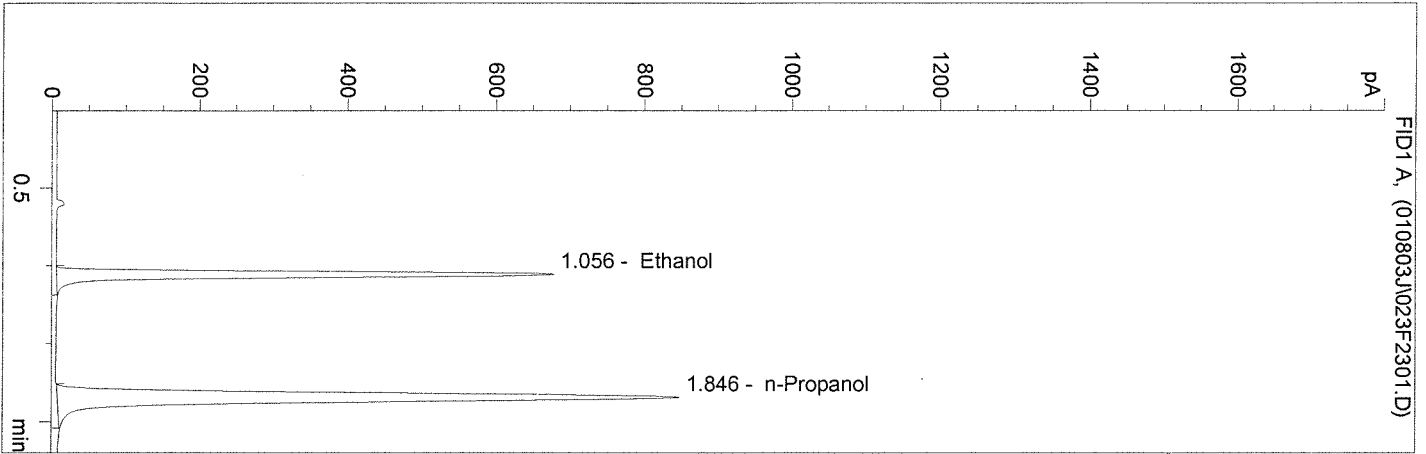


n-Propanol 1.000 g/100ml

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 IDB-ALC1

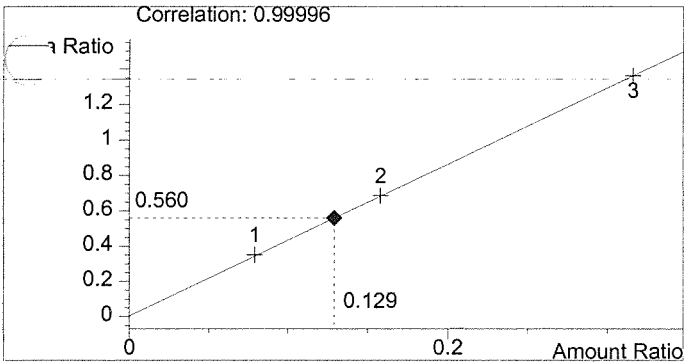
0.10 QA SOLUTION  
 Jayne E. Thatcher

vial # 23

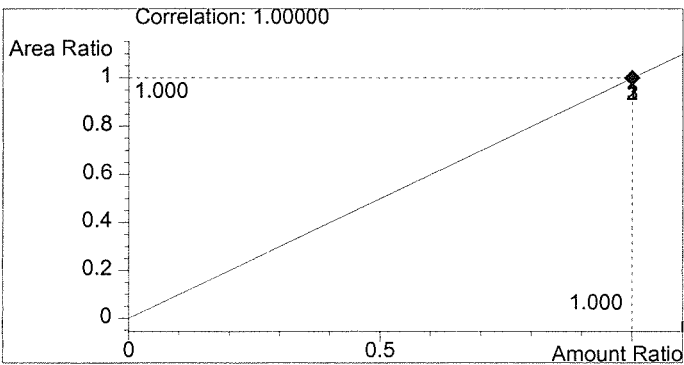


#	Compound	Area	RT
1	Ethanol	1835	1.056
2	n-Propanol	3274	1.846

Totals:



Ethanol 0.129 g/100ml



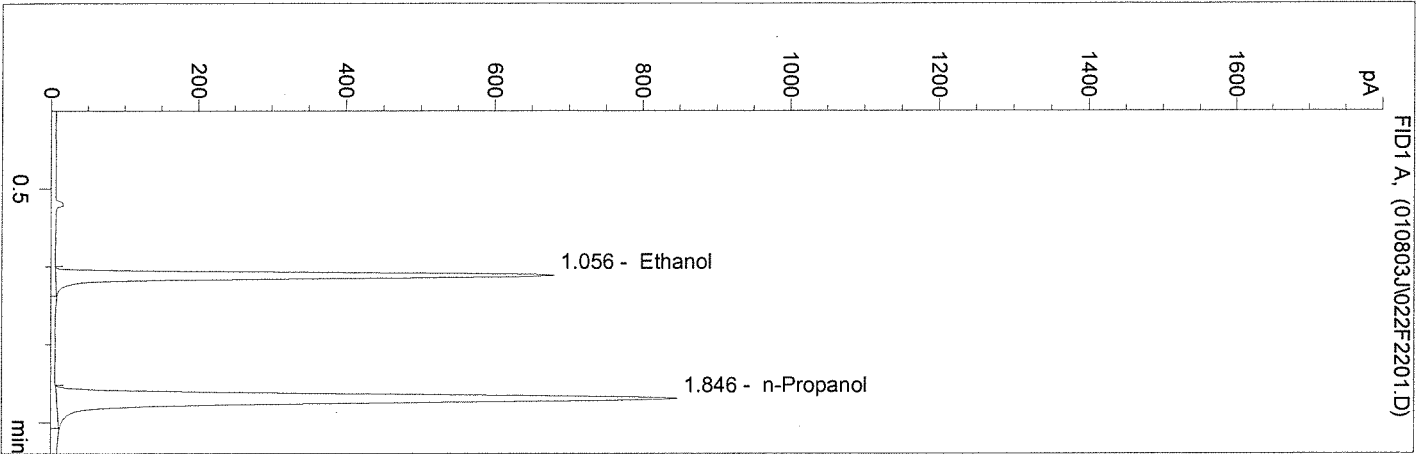
n-Propanol 1.000 g/100ml

WASHINGTON STATE TOXICOLOGY LABORATORY

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 DB-ALC1

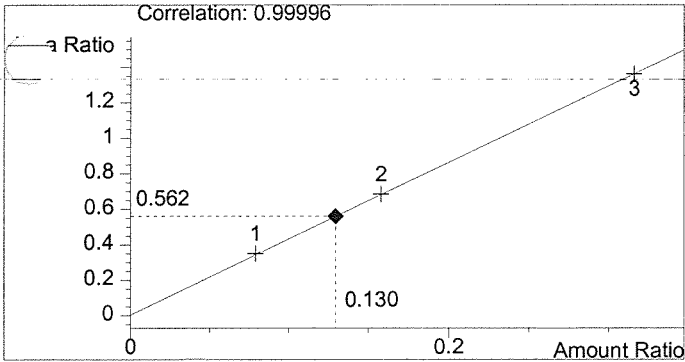
0.10 QA SOLUTION  
 Jayne E. Thatcher

vial # 22

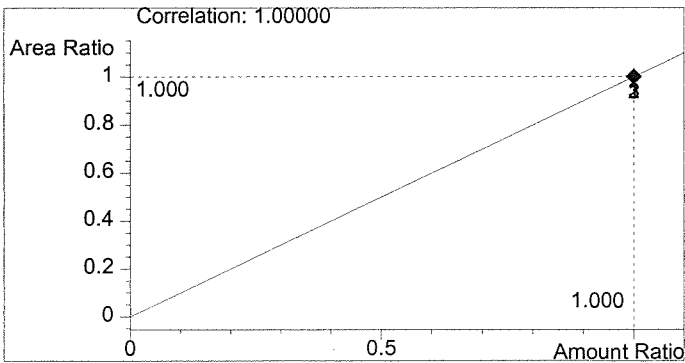


#	Compound	Area	RT
1	Ethanol	1831	1.056
2	n-Propanol	3257	1.846

Totals:



Ethanol 0.130 g/100ml



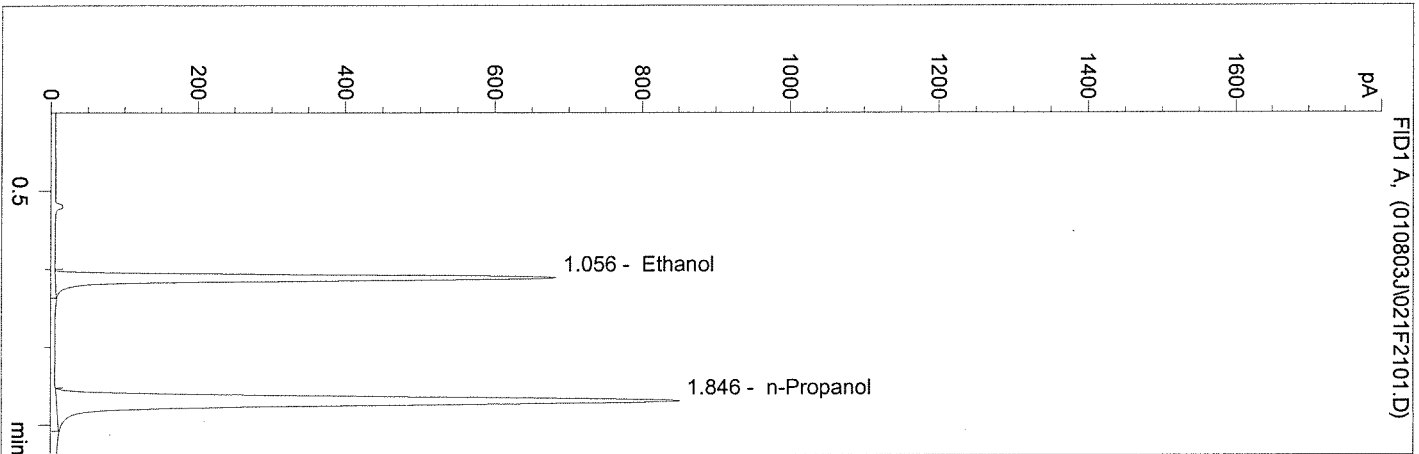
n-Propanol 1.000 g/100ml

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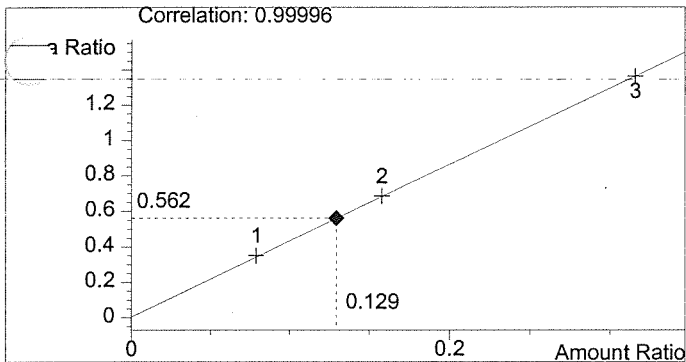
0.10 QA SOLUTION  
 Jayne E. Thatcher

vial # 21

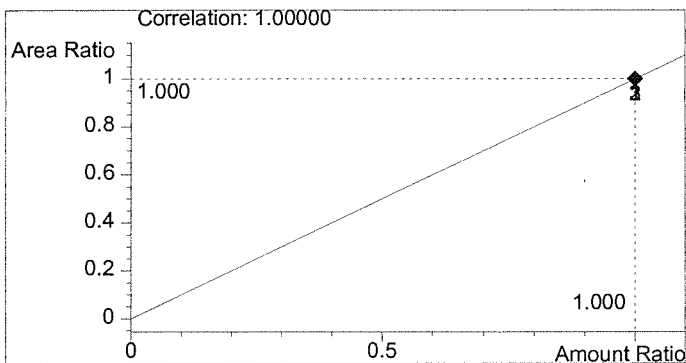


#	Compound	Area	RT
1	Ethanol	1841	1.056
2	n-Propanol	3278	1.846

Totals:



Ethanol 0.129 g/100ml

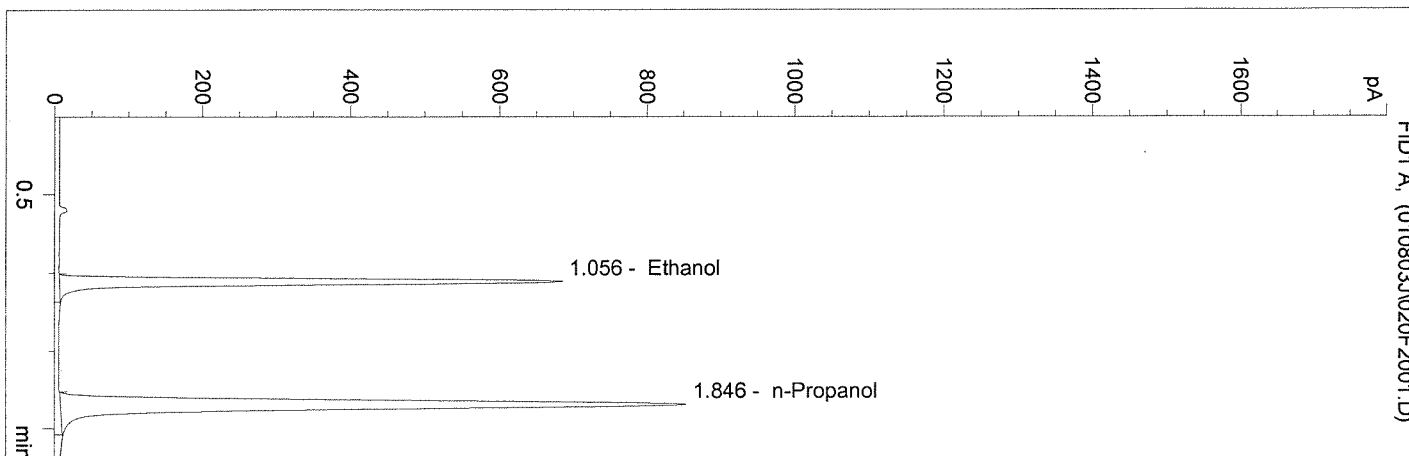


n-Propanol 1.000 g/100ml

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 Instrument 2  
 DB-ALC1

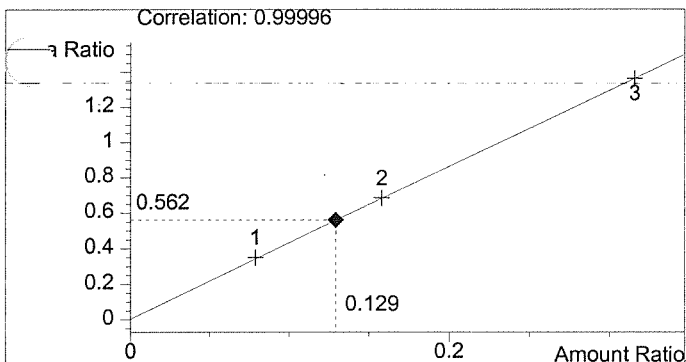
0.10 QA SOLUTION  
 Jayne E. Thatcher

vial # 20

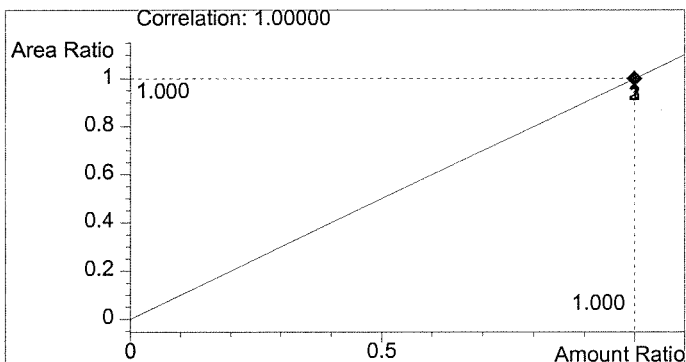


#	Compound	Area	RT
1	Ethanol	1848	1.056
2	n-Propanol	3289	1.846

Totals:



Ethanol 0.129 g/100ml



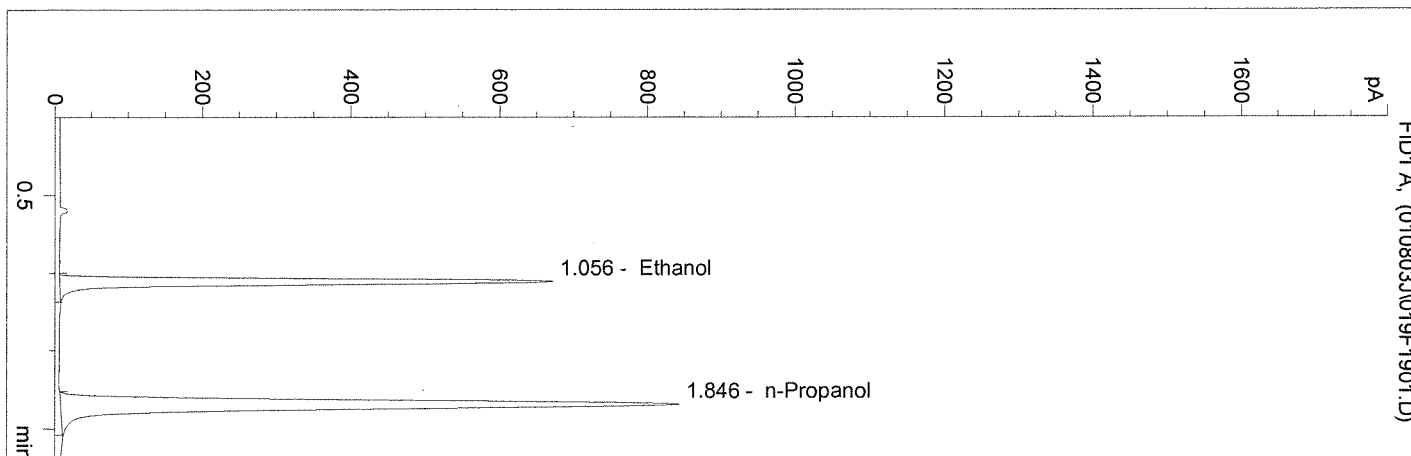
n-Propanol 1.000 g/100ml

WASHINGTON STATE TOXICOLOGY LABORATORY

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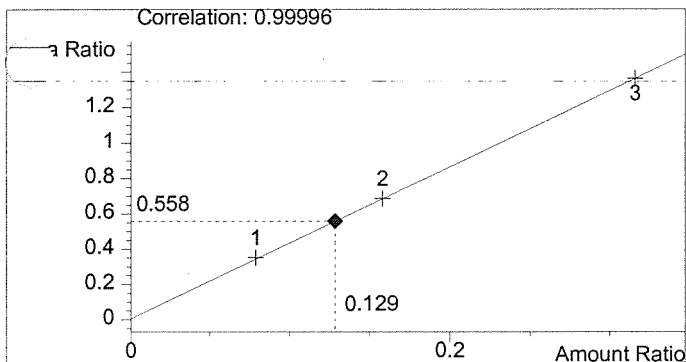
0.10 QA SOLUTION  
 Jayne E. Thatcher

vial # 19

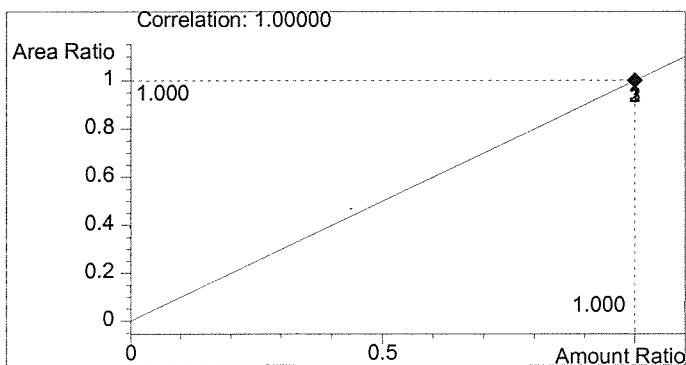


#	Compound	Area	RT
1	Ethanol	1807	1.056
2	n-Propanol	3239	1.846

Totals:



Ethanol 0.129 g/100ml



n-Propanol 1.000 g/100ml

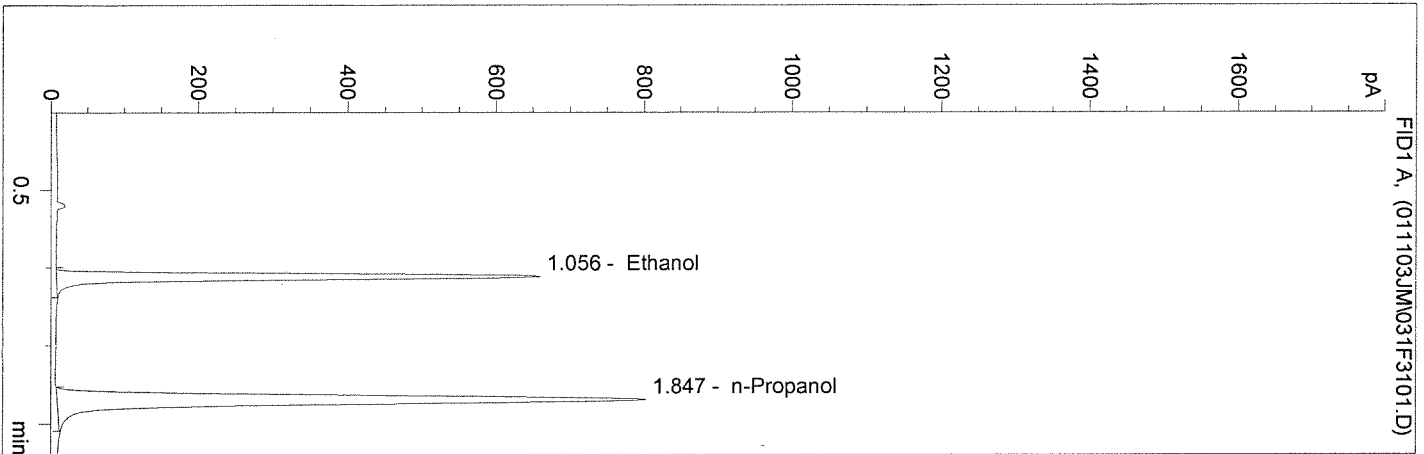


WASHINGTON STATE TOXICOLOGY LABORATORY

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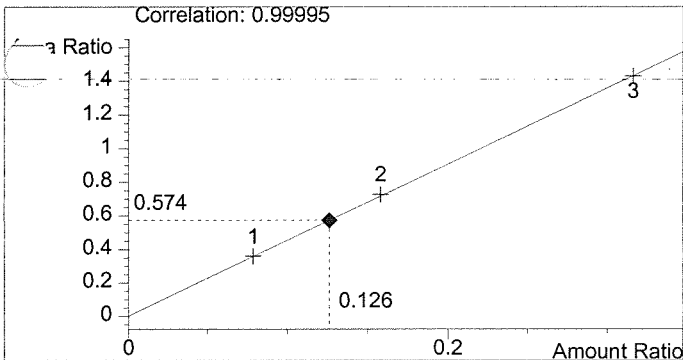
Q.A. Sol. 03003  
 Estuardo J. Miranda

vial # 31

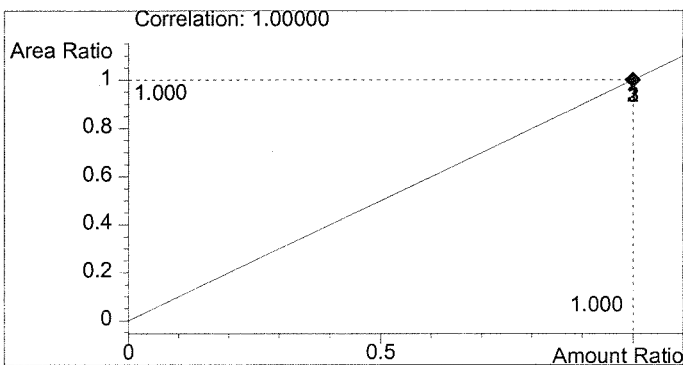


#	Compound	Area	RT
1	Ethanol	1781	1.056
2	n-Propanol	3101	1.847

Totals:



Ethanol 0.126 g/100ml



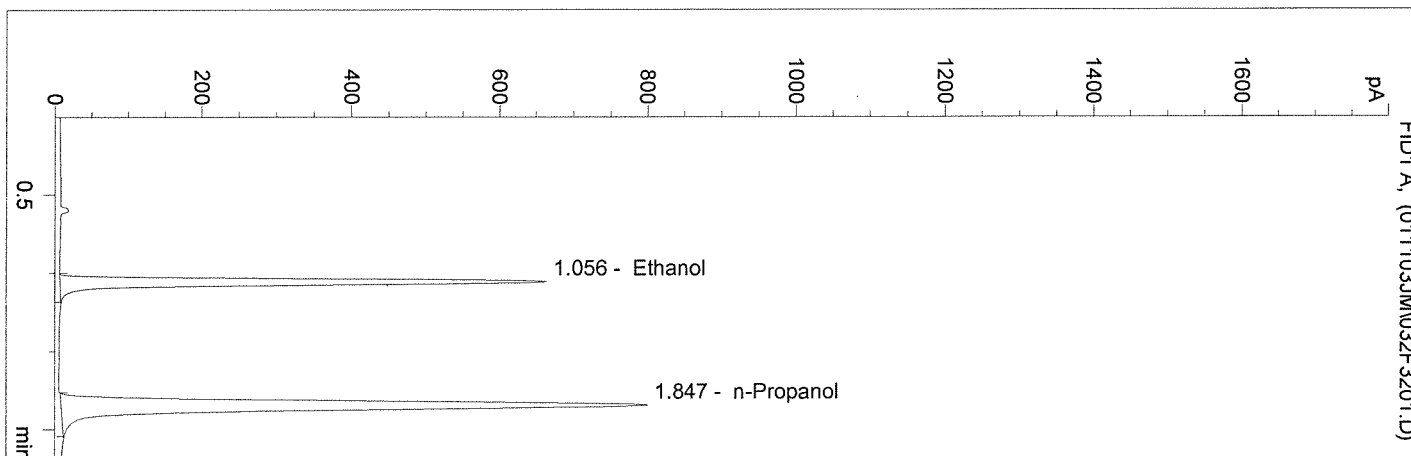
n-Propanol 1.000 g/100ml

WASHINGTON STATE TOXICOLOGY LABORATORY

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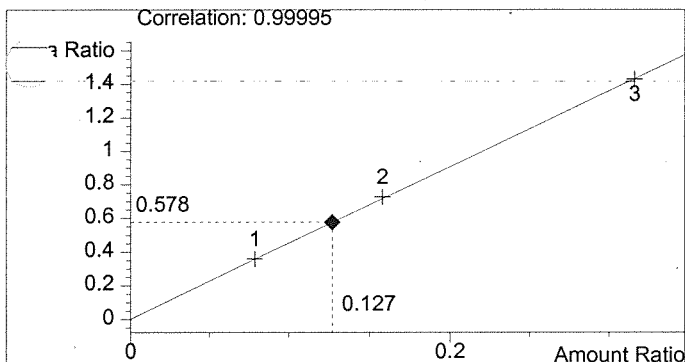
Q.A. Sol. 03003  
 Estuardo J. Miranda

vial # 32

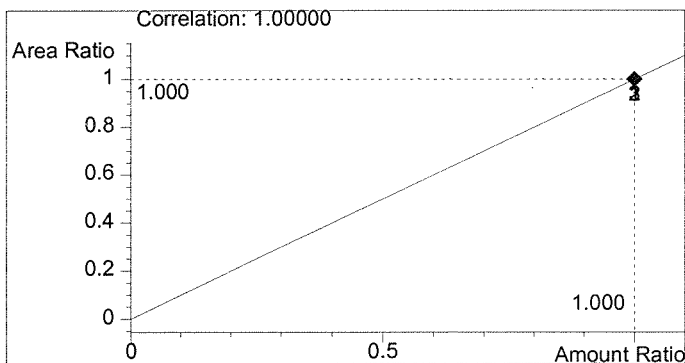


#	Compound	Area	RT
1	Ethanol	1790	1.056
2	n-Propanol	3097	1.847

Totals:



Ethanol 0.127 g/100ml



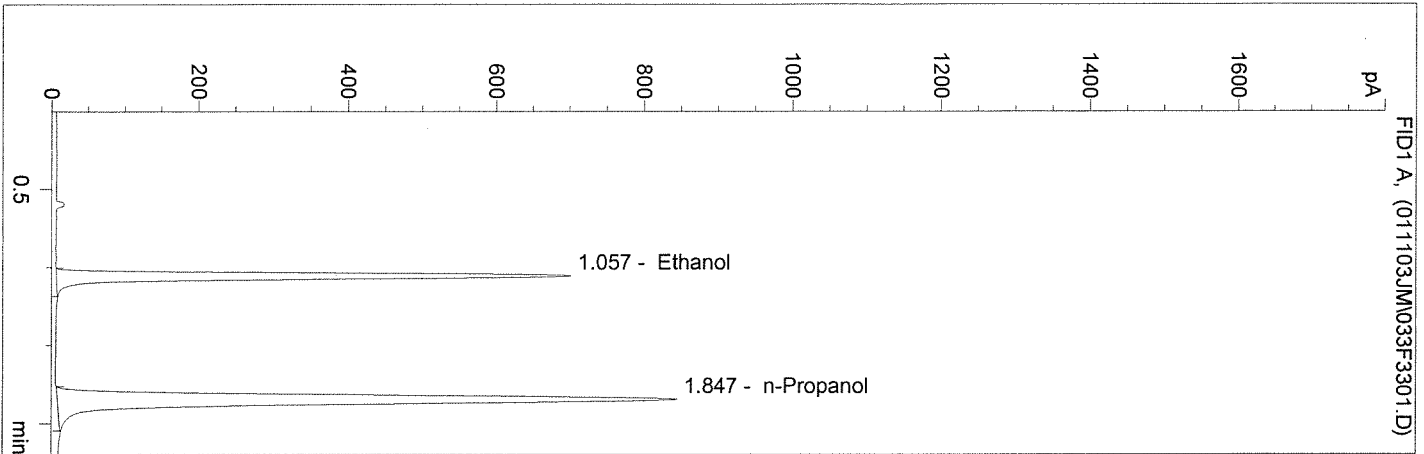
n-Propanol 1.000 g/100ml

WASHINGTON STATE TOXICOLOGY LABORATORY

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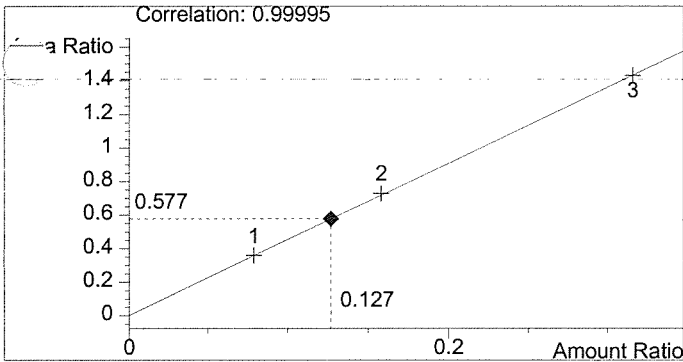
Q.A. Sol. 03003  
 Estuardo J. Miranda

vial # 33

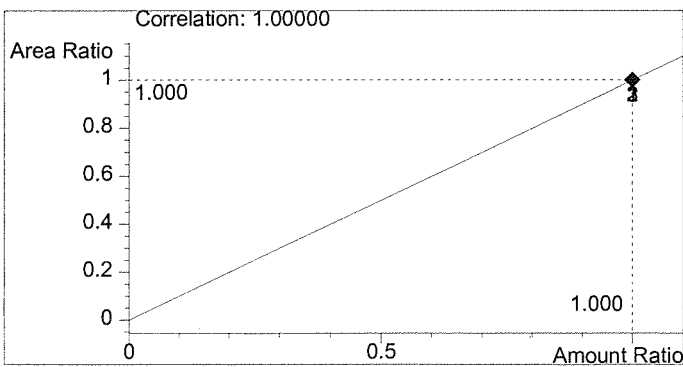


#	Compound	Area	RT
1	Ethanol	1884	1.057
2	n-Propanol	3265	1.847

Totals:



Ethanol 0.127 g/100ml



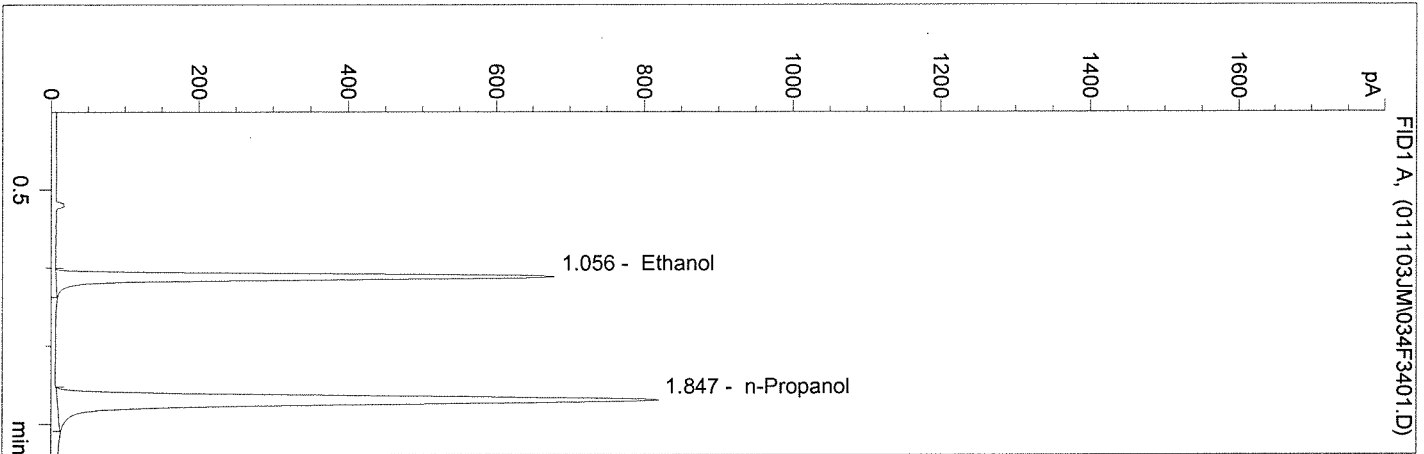
n-Propanol 1.000 g/100ml

WASHINGTON STATE TOXICOLOGY LABORATORY

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 Instrument 2  
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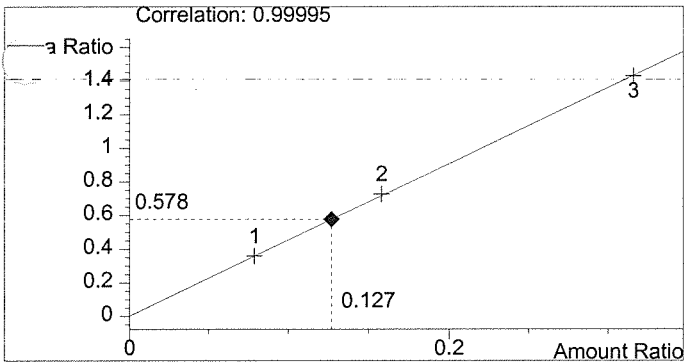
Q.A. Sol. 03003  
 Estuardo J. Miranda

vial # 34

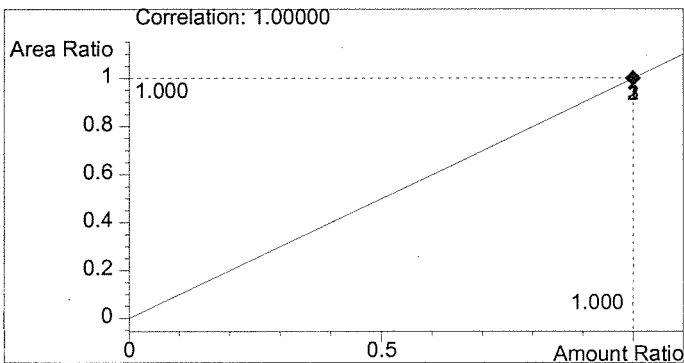


#	Compound	Area	RT
1	Ethanol	1830	1.056
2	n-Propanol	3163	1.847

Totals:



Ethanol 0.127 g/100ml



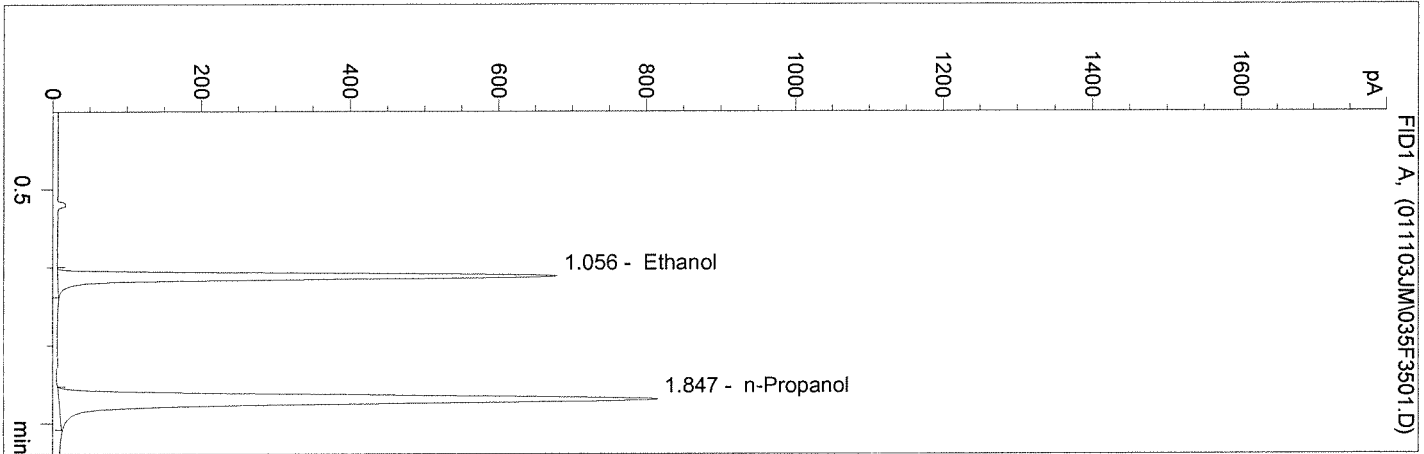
n-Propanol 1.000 g/100ml

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C:\HPCHEM\2\METHODS\BLDALCO2.M  
 1/11/03 3:03:25 PM  
 Instrument 2  
 -ALC1

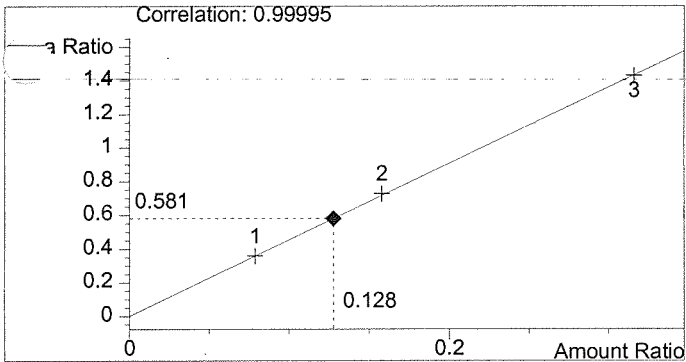
Q.A. Sol. 03003  
 Estuardo J. Miranda

vial # 35

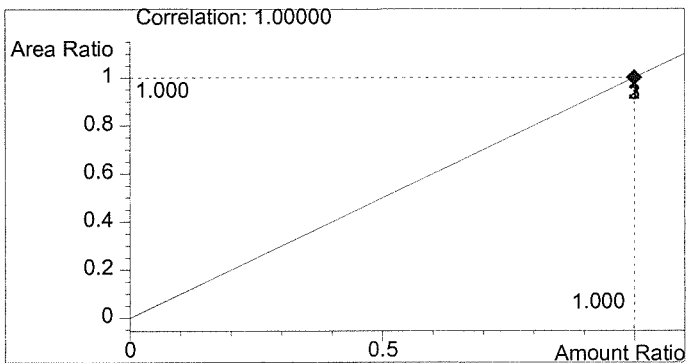


#	Compound	Area	RT
1	Ethanol	1831	1.056
2	n-Propanol	3151	1.847

Totals:



Ethanol 0.128 g/100ml



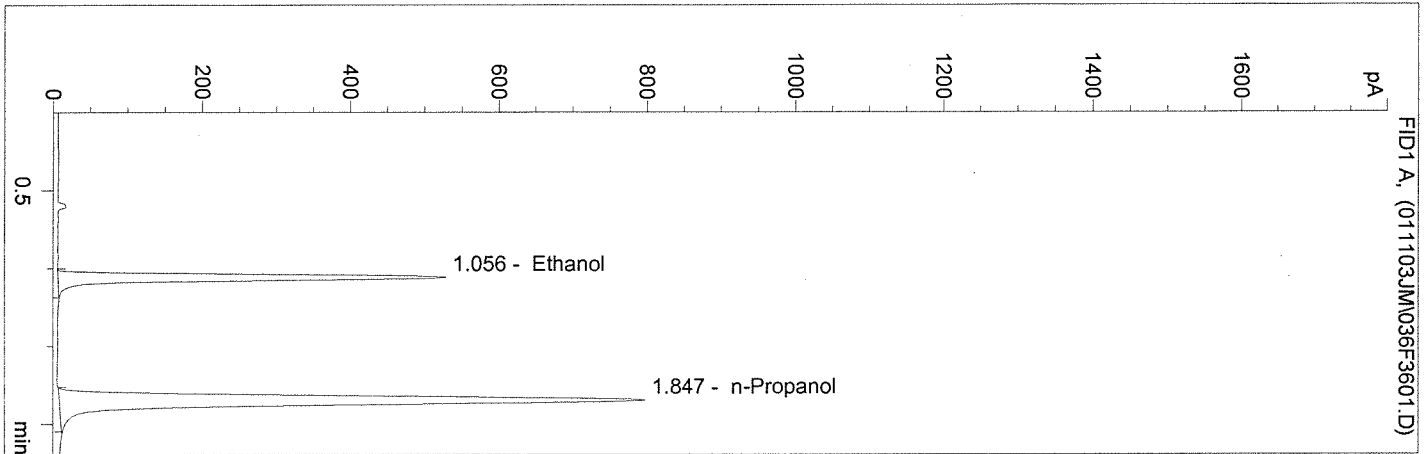
n-Propanol 1.000 g/100ml

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C:\HPCHEM\2\METHODS\BLDALCO2.M  
 1/11/03 3:06:27 PM  
 Instrument 2  
 -ALC1

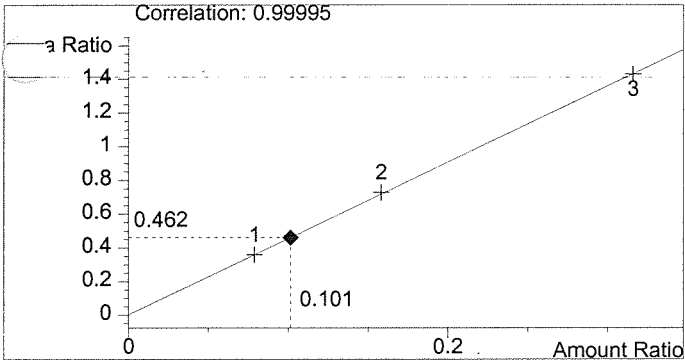
0.100 Control  
 Estuardo J. Miranda

vial # 36

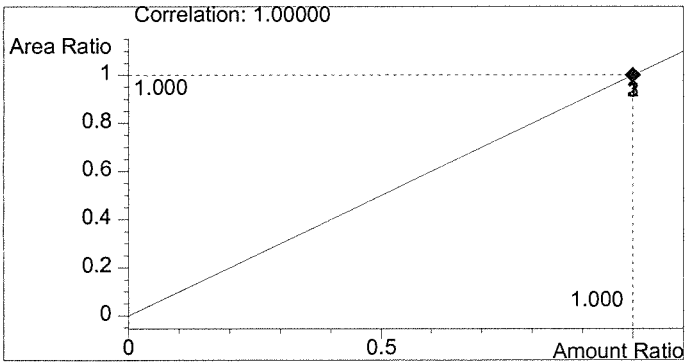


#	Compound	Area	RT
1	Ethanol	1423	1.056
2	n-Propanol	3082	1.847

Totals:



Ethanol 0.101 g/100ml

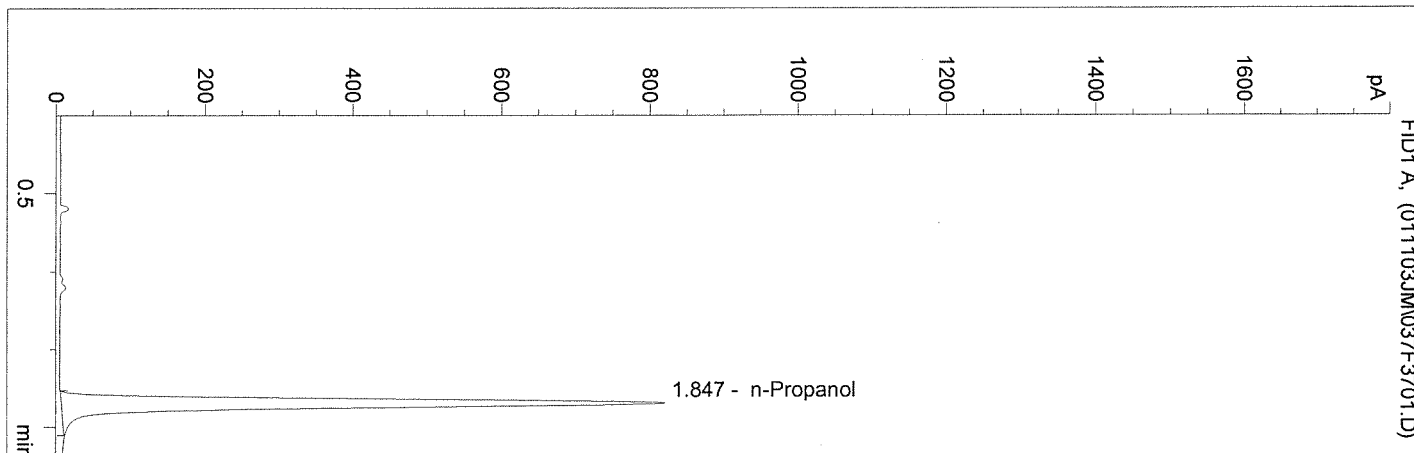


n-Propanol 1.000 g/100ml

C:\HPCHEM\2\METHODS\BLDALCO2.M  
 1/11/03 3:09:44 PM  
 Instrument 2  
 -ALC1

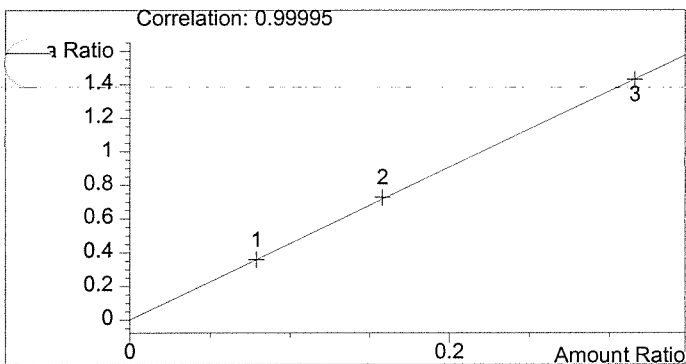
Blank  
 Estuardo J. Miranda

vial # 37

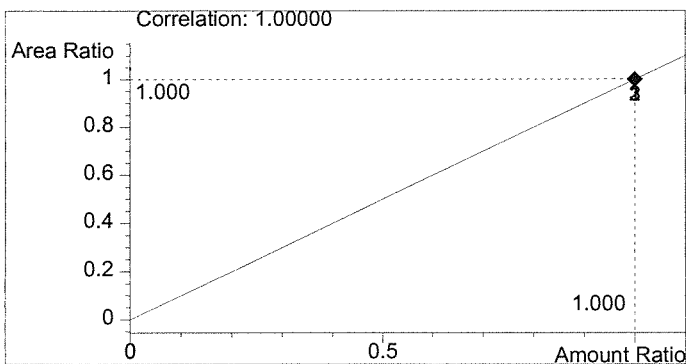


#	Compound	Area	RT
1	Ethanol	0	0.000
2	n-Propanol	3175	1.847

Totals:



Ethanol 0.000 g/100ml



n-Propanol 1.000 g/100ml