

**WASHINGTON STATE TOXICOLOGY LABORATORY  
SIMULATOR SOLUTION DATA ENTRY REVIEW**



Reviewer/s: KEN DENTON / PDA GULLBERG Date: 1-14-2008

Location: TOX LAB SEATTLE Solution Batch Number: 04013

	YES	NO	N/A
Preparation date precedes all analysis dates:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Data entry corresponds to all chromatograms:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All signatures present on Analysis sheet:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Avg. solution concentration correct?:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Standard deviation correct:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Range correct if applicable:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equivalent vapor concentration correct?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
External Control information correct: (lot # present and future date)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Complies with accuracy and precision requirements established by the State Toxicologist:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CV% Correct?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

DATE OF ANALYSIS FOR MELISSA MEMBERTON  
INCORRECT

Reviewer Signature: [Signature] Date: 1-14-2008

Reviewer Signature: [Signature] Date: 1/14/2008

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

Batch number **04013**

Date: 4/21/2004

Preparation: 42.3 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	0.186	0.185	0.184									
2	0.186	0.184	0.185									
3	0.187	0.185	0.184									
4	0.186	0.186	0.183									
5	0.188	0.185	0.184									
Ctrl	0.101	0.098	0.099									

**External Control:**

Lot #: A024546 Exp date: 09/05

Target concentration: 0.10 g/100mL

**Statistics:**

Avg. solution concent.: 0.1852 g/100 mL

SD: 0.00132

Range (3xSD): 0.1812 to 0.1892

Precision CV (%): 0.7128 %

**Equivalent vapor concent.:** 0.1506 g/210L

Analyst	Name	Signature	Date
1	Kari Gruendell	<i>Kari Gruendell</i>	04/22/04
2	Melissa Pemberton	<i>Melissa Pemberton</i>	04/27/04
3	William P Marshall	<i>William P Marshall</i>	04/27/04
4			
5			
6			
7			
8			
9			
10			
11			
12			

*4-26-04*  
*WPM*  
*1-14-08*

Prepared by: Kari Gruendell according to the approved protocol



STATE OF WASHINGTON  
WASHINGTON STATE PATROL  
WASHINGTON STATE TOXICOLOGY LABORATORY

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BAC VERIFIER DATAMASTER QUALITY ASSURANCE SOLUTION  
CERTIFICATION

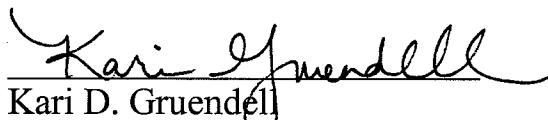
I, Kari D. Gruendell, do certify under penalty of perjury as follows:

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 and two years of analytical laboratory experience.

The quality assurance solution, Lot Number 04013, was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.1852 grams per 100ml.

Dated: 4/30/04  
Seattle, WA

  
Kari D. Gruendell  
Forensic Toxicologist

KDG/bf  
KDGQA





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BAC VERIFIER DATAMASTER QUALITY ASSURANCE SOLUTION  
CERTIFICATION

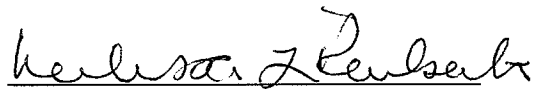
I, Melissa L. Pemberton, do certify under penalty of perjury that:

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: Bachelors degree in Microbiology and ten years of experience as a forensic toxicologist.


The quality assurance solution, Lot Number 04013 was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.1852 grams per 100ml.

Dated: 4/30/04  
Seattle, WA

  
Melissa L. Pemberton  
Forensic Toxicologist

MP/bf  
MPQA

A review of solution batch records was recently completed. After this review, I checked the file for this solution and reviewed all changes that were made. I found that the solution still conformed to those standards established by the State Toxicologist for the certification of simulator solutions.

  
1-1500





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BAC VERIFIER DATAMASTER QUALITY ASSURANCE SOLUTION  
CERTIFICATION

I, William P. Marshall, 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 Chemistry and thirty-one years of analytical laboratory experience including fifteen years of toxicology experience.

The quality assurance solution, Lot Number 04013 was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.1852 grams per 100ml.

Dated: 4/30/04  
Seattle, WA

William P. Marshall  
Forensic Toxicologist

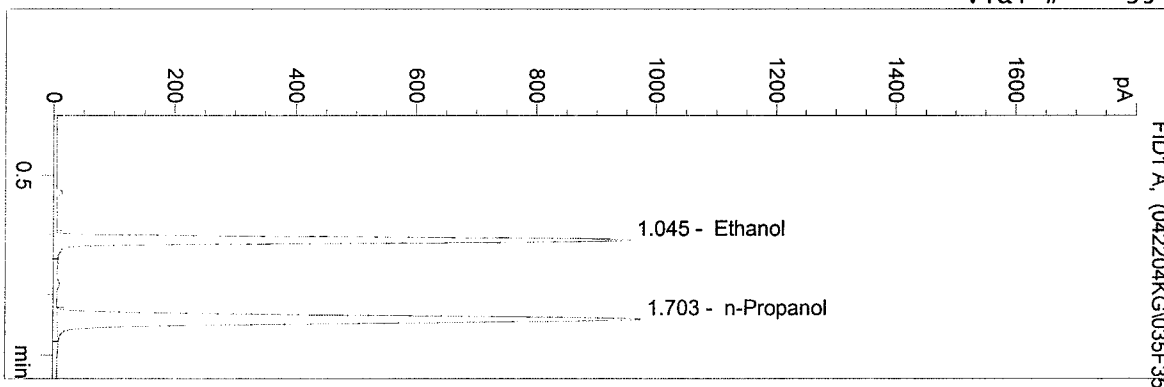
WM/bf  
WMQA



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 PS-ALC1

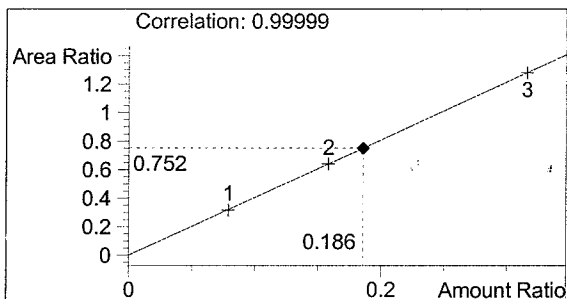
QA 04013  
 Kari Gruendell

vial # 35

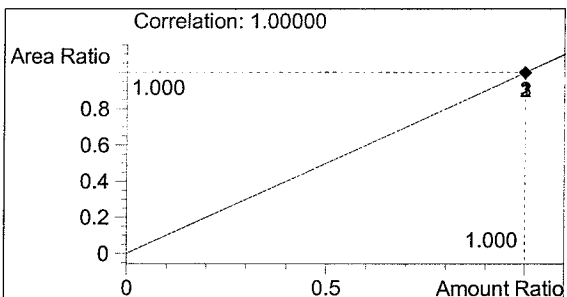


#	Compound	Area	RT
1	Ethanol	3205	1.045
2	n-Propanol	4264	1.703

Totals:



Ethanol 0.186 g/100ml

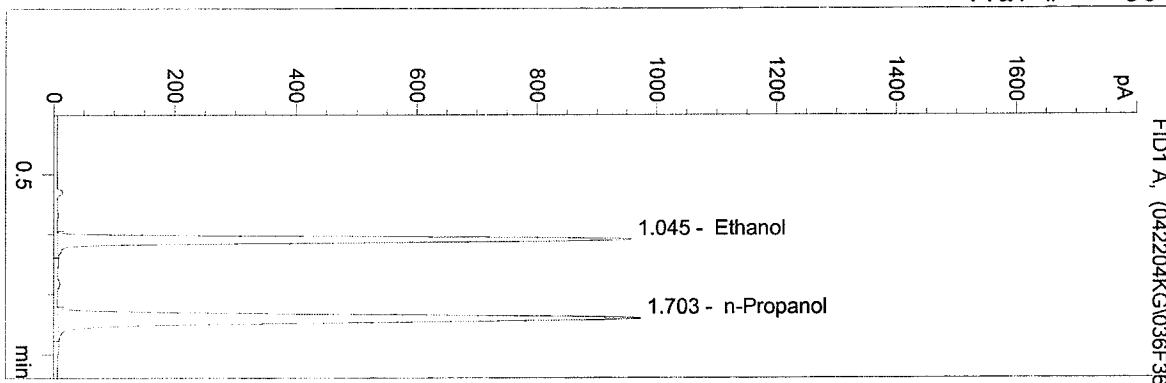


n-Propanol 1.000 g/100ml

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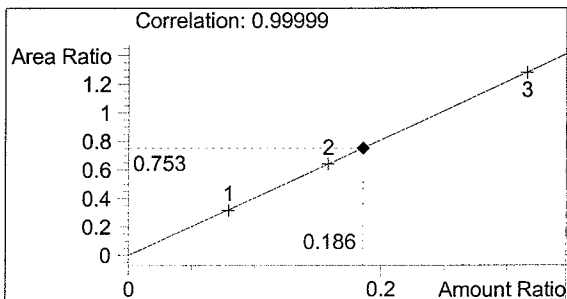
QA 04013  
 Kari Gruendell

vial # 36

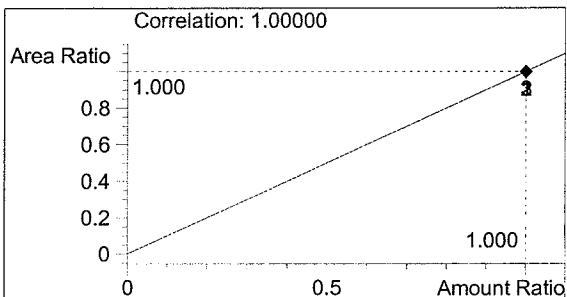


#	Compound	Area	RT
1	Ethanol	3204	1.045
2	n-Propanol	4253	1.703

Totals:



Ethanol 0.186 g/100ml

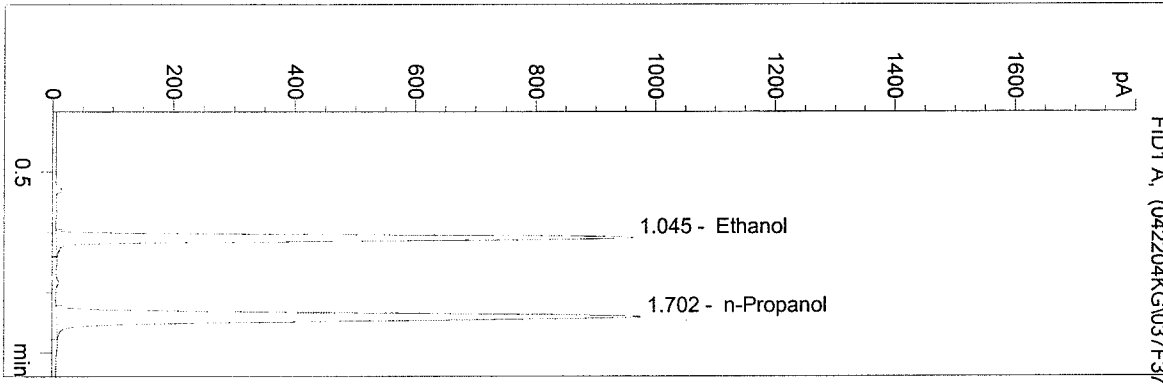


n-Propanol 1.000 g/100ml

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 PP-ALC1

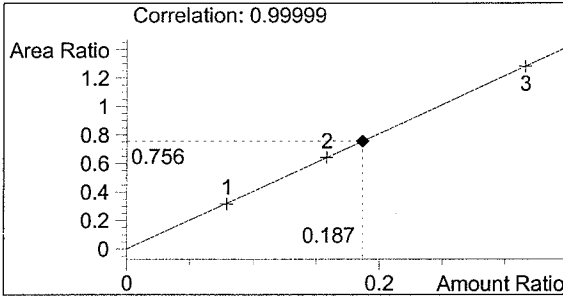
QA 04013  
 Kari Gruendell

vial # 37

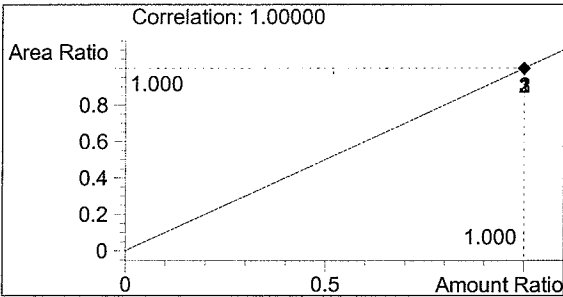


#	Compound	Area	RT
1	Ethanol	3224	1.045
2	n-Propanol	4263	1.702

Totals:



Ethanol 0.187 g/100ml



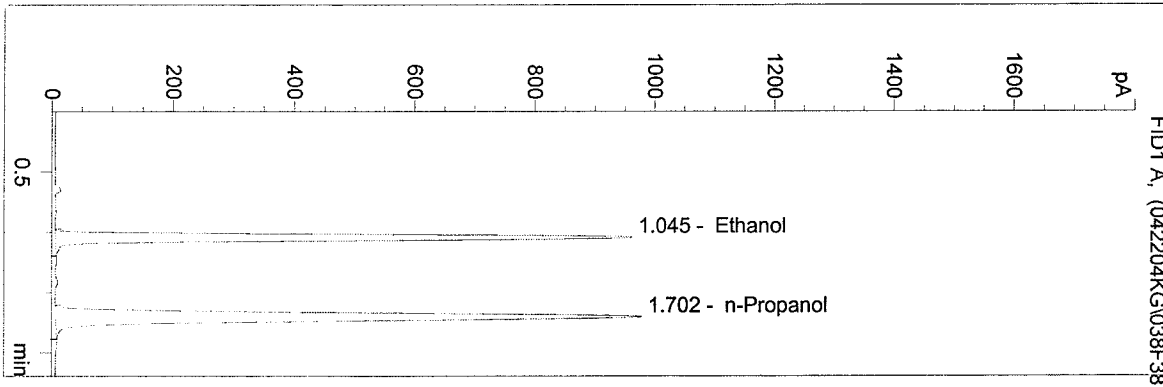
n-Propanol 1.000 g/100ml



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 DP-ALC1

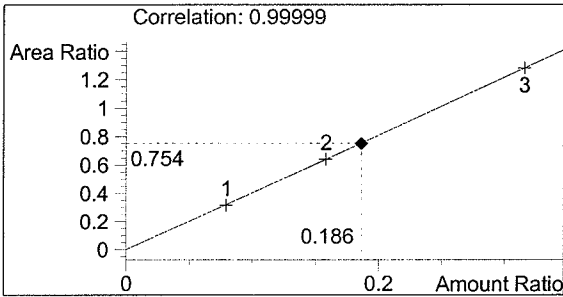
QA 04013  
 Kari Gruendell

vial # 38

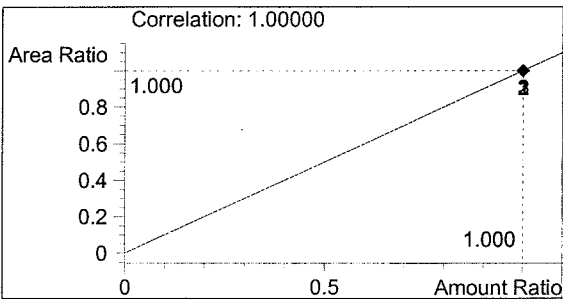


#	Compound	Area	RT
1	Ethanol	3222	1.045
2	n-Propanol	4275	1.702

Totals:



Ethanol 0.186 g/100ml

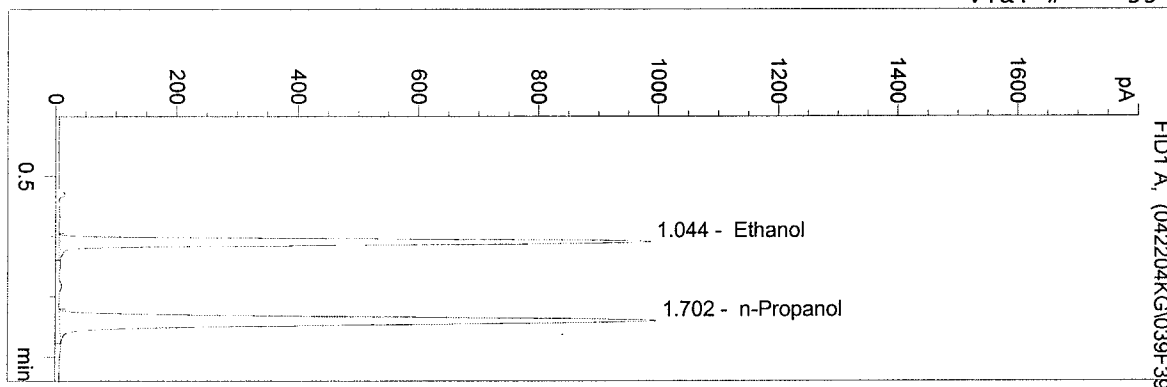


n-Propanol 1.000 g/100ml

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 P<sup>n</sup>-ALC1

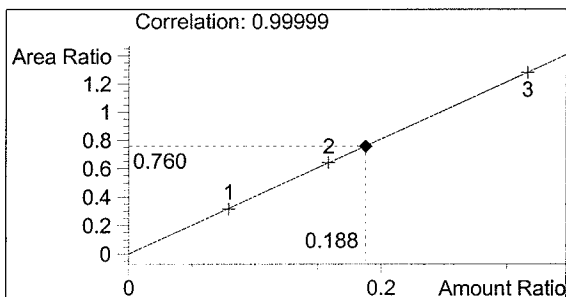
QA 04013  
 Kari Gruendell

vial # 39

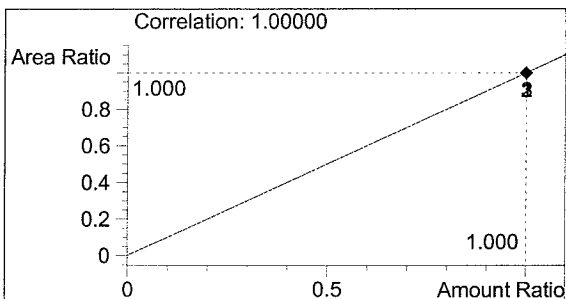


#	Compound	Area	RT
1	Ethanol	3310	1.044
2	n-Propanol	4355	1.702

Totals:



Ethanol 0.188 g/100ml

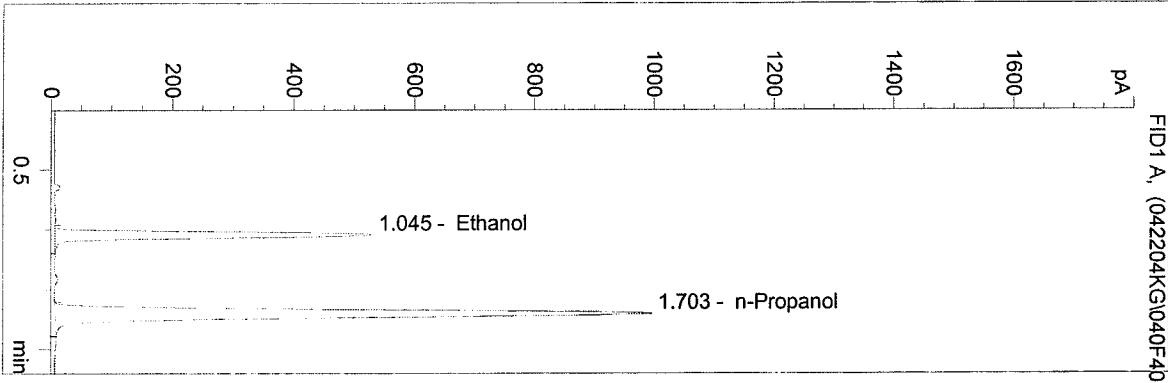


n-Propanol 1.000 g/100ml

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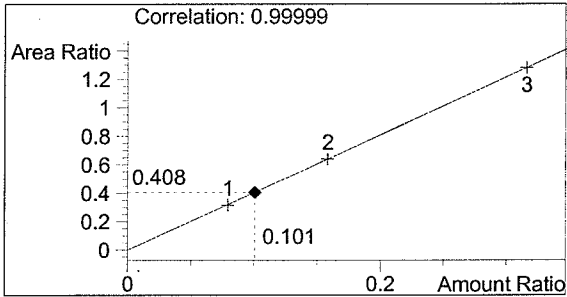
0.10 CONTROL  
 Kari Gruendell

vial # 40

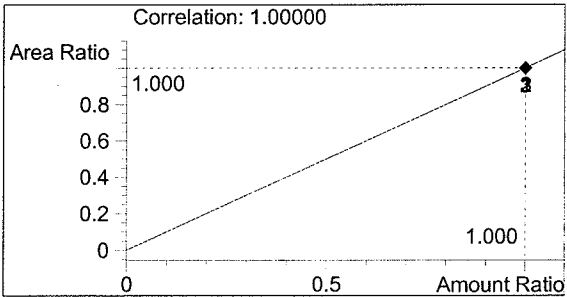


#	Compound	Area	RT
1	Ethanol	1776	1.045
2	n-Propanol	4357	1.703

Totals:



Ethanol 0.101 g/100ml

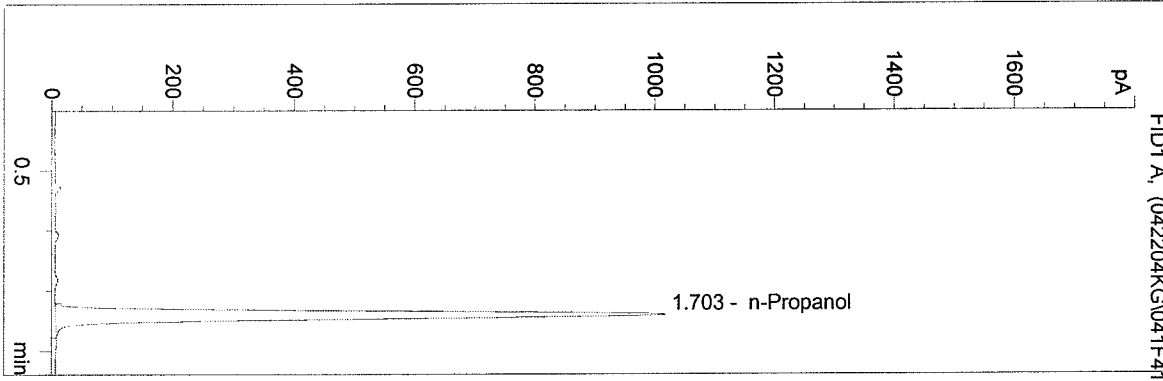


n-Propanol 1.000 g/100ml

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 DP-ALC1

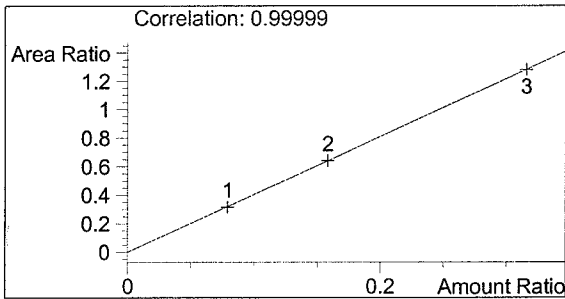
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 Kari Gruendell

vial # 41

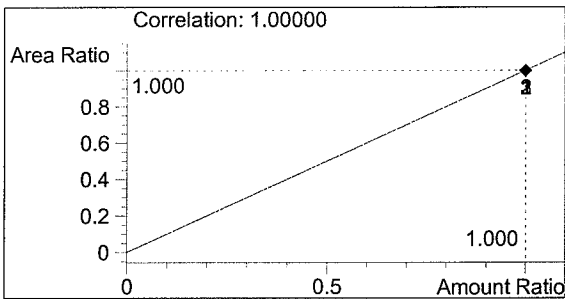


#	Compound	Area	RT
1	Ethanol	0	0.000
2	n-Propanol	4458	1.703

Totals:



Ethanol 0.000 g/100ml

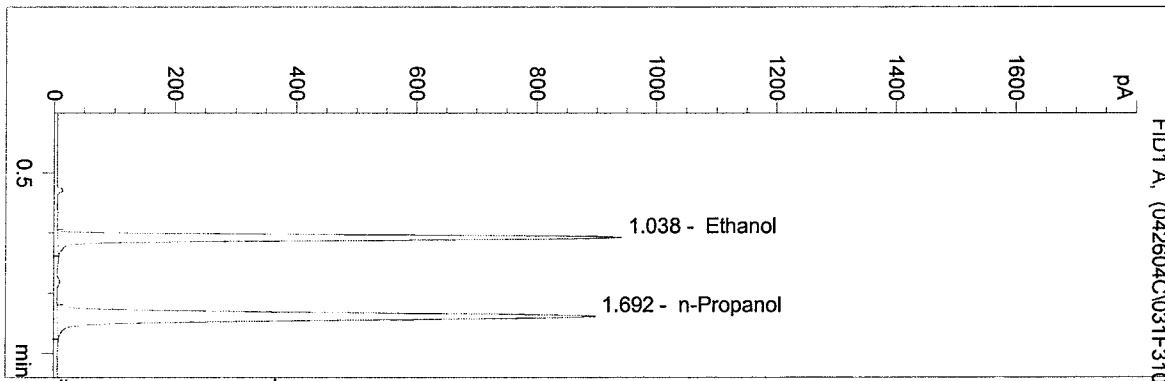


n-Propanol 1.000 g/100ml

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 FID1 ALC1

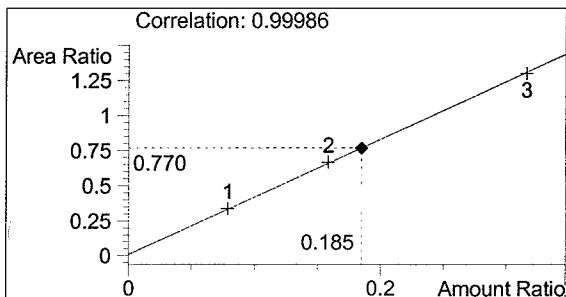
04013 0.15qa  
 m pemberton

vial # 31

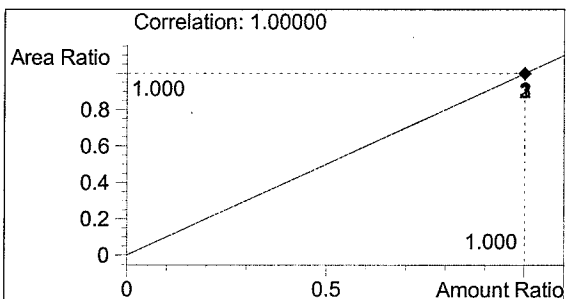


#	Compound	Area	RT
1	Ethanol	2925	1.038
2	n-Propanol	3800	1.692

Totals:



Ethanol 0.185 g/100ml



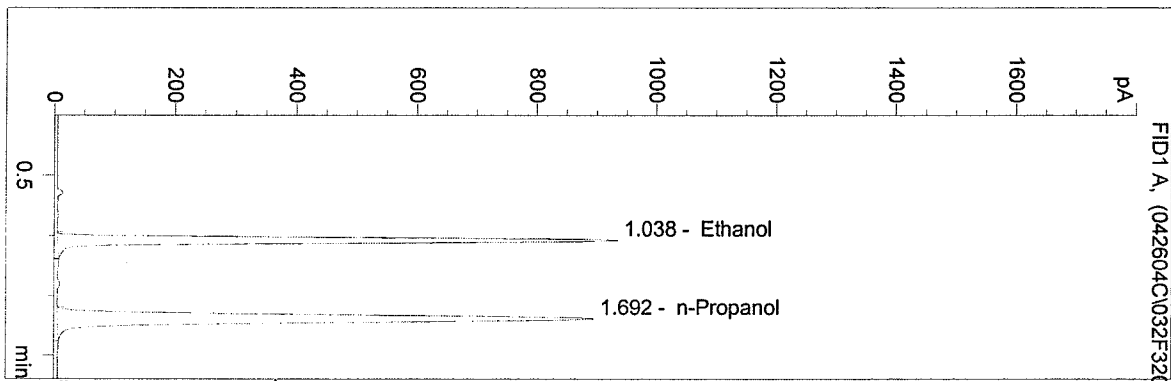
n-Propanol 1.000 g/100ml

*Handwritten:* 1-15-05

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 P2-ALC1

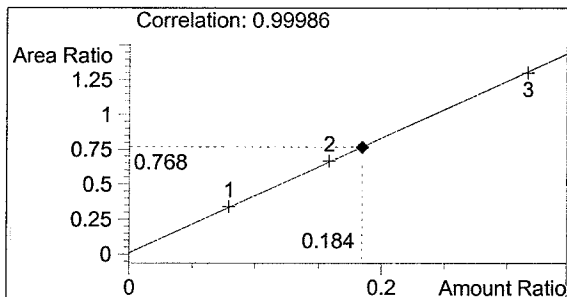
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 m pemberton

vial # 32

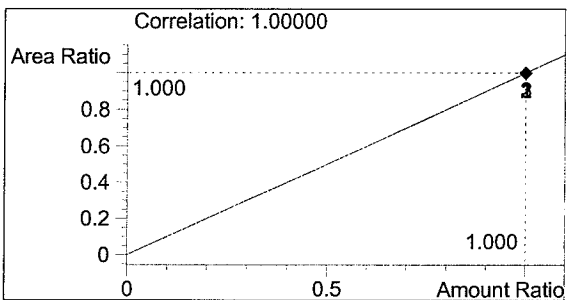


#	Compound	Area	RT
1	Ethanol	2904	1.038
2	n-Propanol	3780	1.692

Totals:



Ethanol 0.184 g/100ml



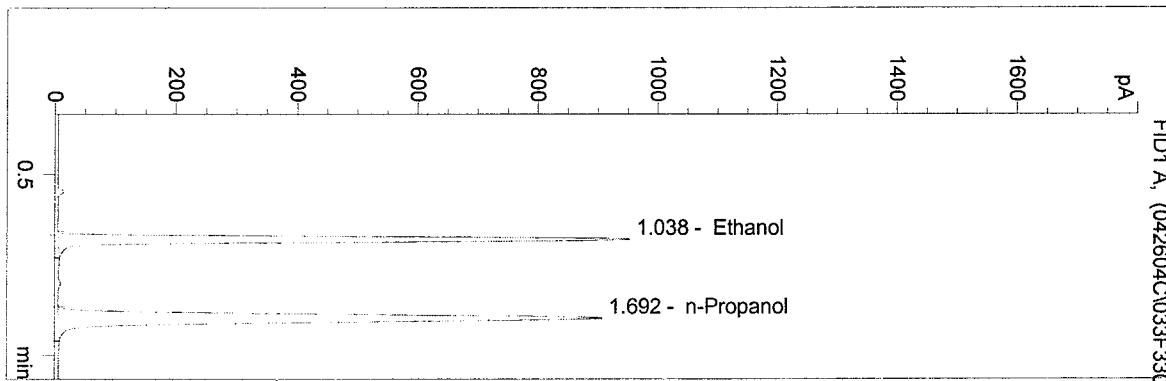
n-Propanol 1.000 g/100ml

*lp*  
 1-15-08

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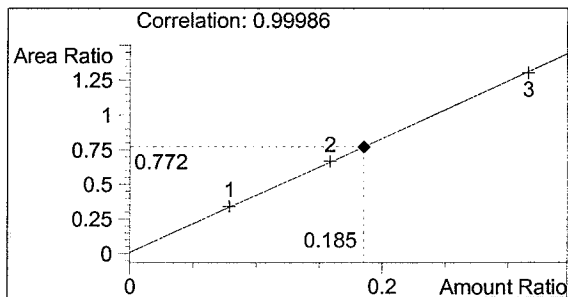
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 m pemberton

vial # 33

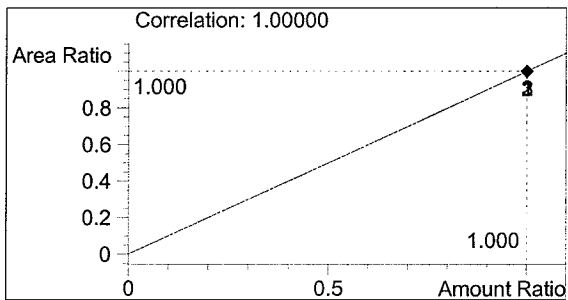


#	Compound	Area	RT
1	Ethanol	2963	1.038
2	n-Propanol	3837	1.692

Totals:



Ethanol 0.185 g/100ml



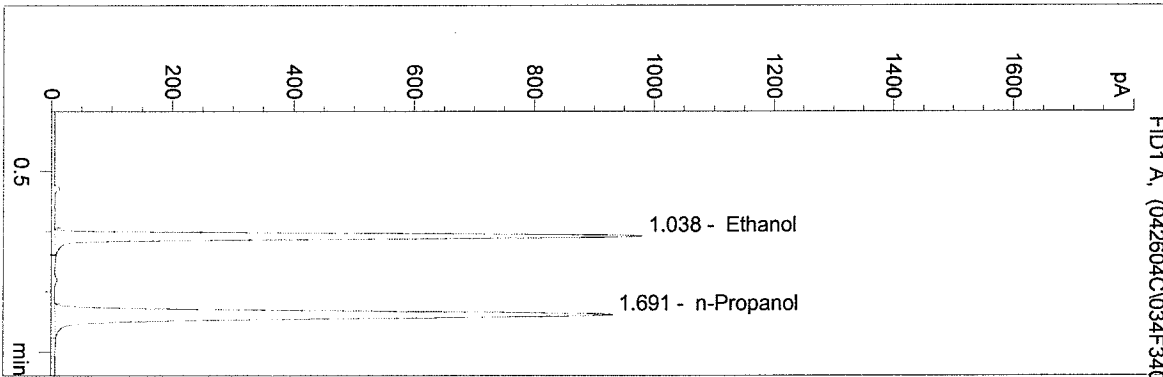
n-Propanol 1.000 g/100ml

*bp*  
 1-15-08

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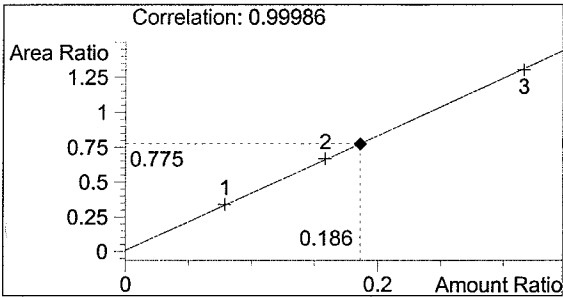
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 m pembedon

vial # 34

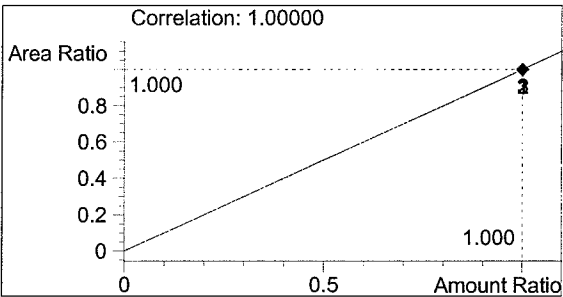


#	Compound	Area	RT
1	Ethanol	3048	1.038
2	n-Propanol	3934	1.691

Totals:



Ethanol 0.186 g/100ml



n-Propanol 1.000 g/100ml

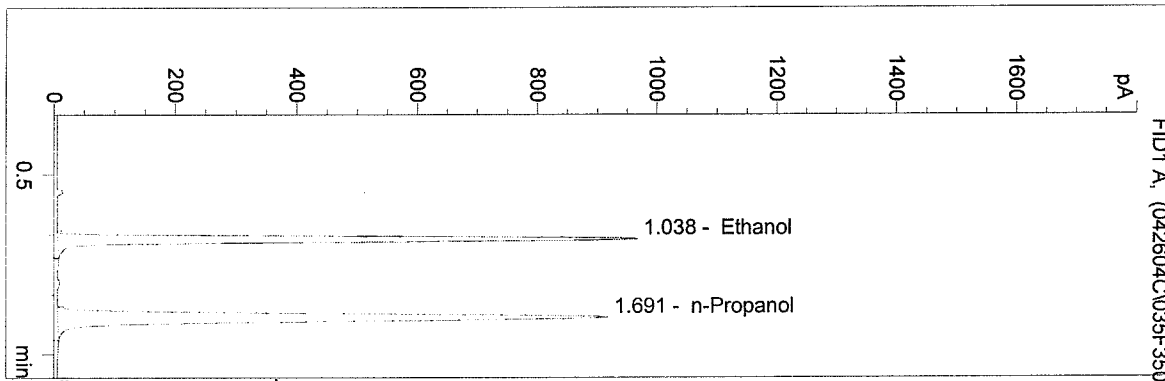
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 1-15-08



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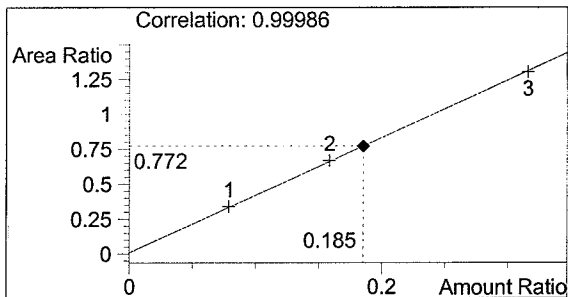
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 m pemberton

vial # 35

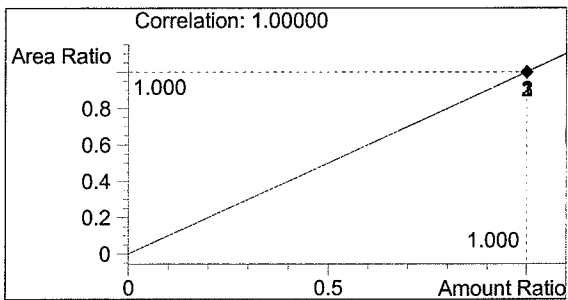


#	Compound	Area	RT
1	Ethanol	2993	1.038
2	n-Propanol	3876	1.691

Totals:



Ethanol 0.185 g/100ml



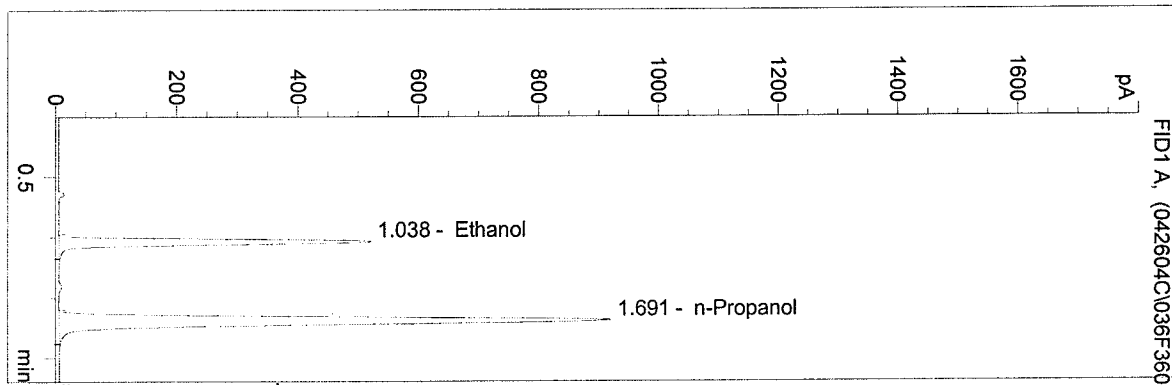
n-Propanol 1.000 g/100ml

*Handwritten signature*  
 1-15-08

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 PP-ALC1

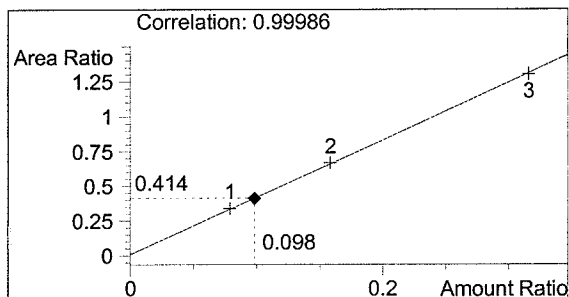
0.10 control  
 m pemberton

vial # 36

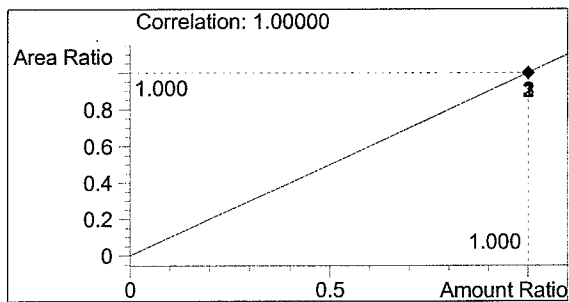


#	Compound	Area	RT
1	Ethanol	1611	1.038
2	n-Propanol	3892	1.691

Totals:



Ethanol 0.098 g/100ml

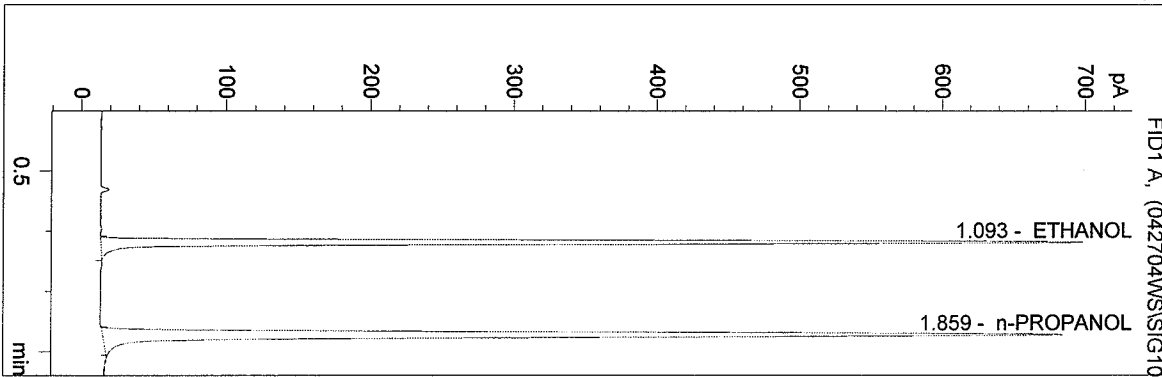


n-Propanol 1.000 g/100ml

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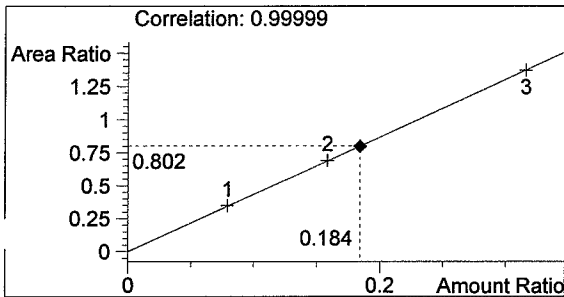
QA 04013  
 WP MARSHALL

vial # 20

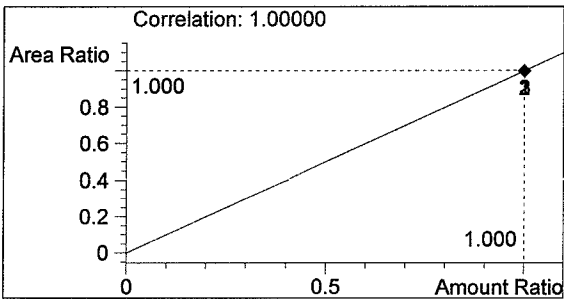


#	Compound	Area	RT
1	ETHANOL	1606	1.093
2	n-PROPANOL	2004	1.859

Totals:



ETHANOL 0.184 g/100mL

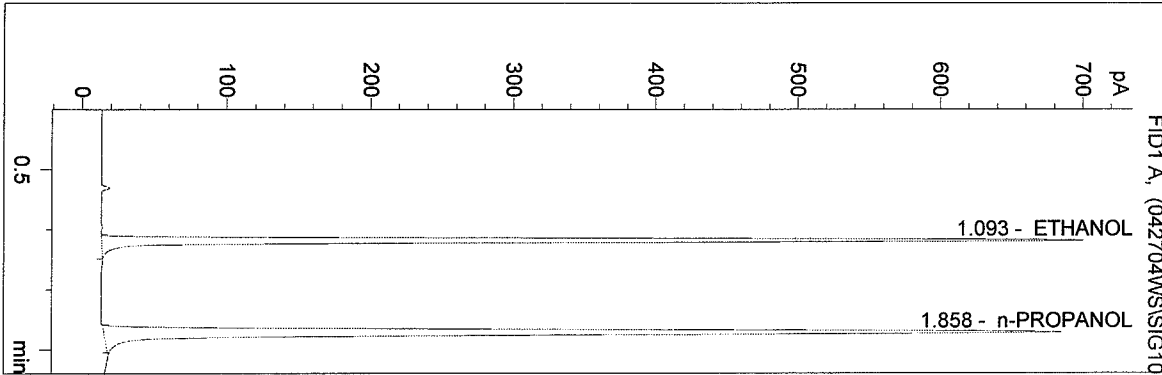


n-PROPANOL 1.000 g/100mL

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 DS-A1c2

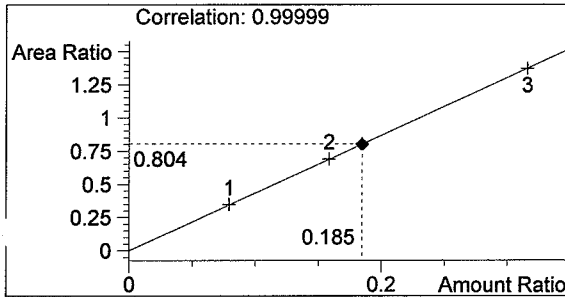
QA 04013  
 WP MARSHALL

vial # 21

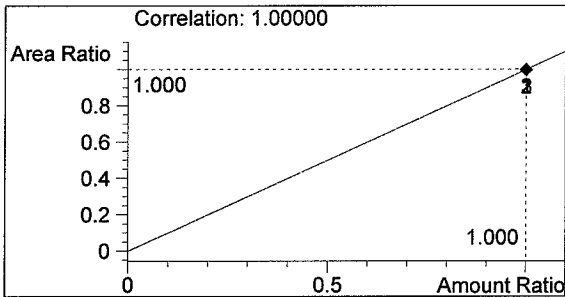


#	Compound	Area	RT
1	ETHANOL	1616	1.093
2	n-PROPANOL	2010	1.858

Totals:



ETHANOL 0.185 g/100mL



n-PROPANOL 1.000 g/100mL

C:\HPCHEM\1\METHODS\BLDALCO3.M

4/27/04 12:12:25 PM

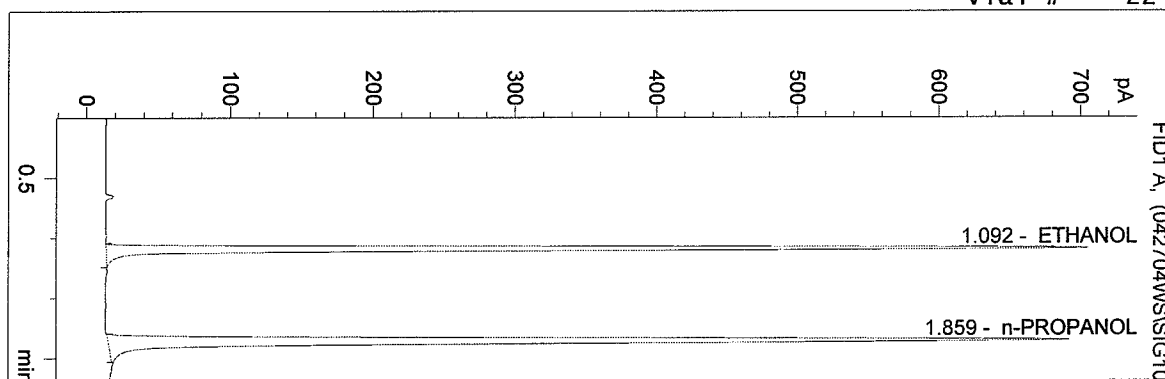
Instrument 3

DP-A1c2

QA 04013

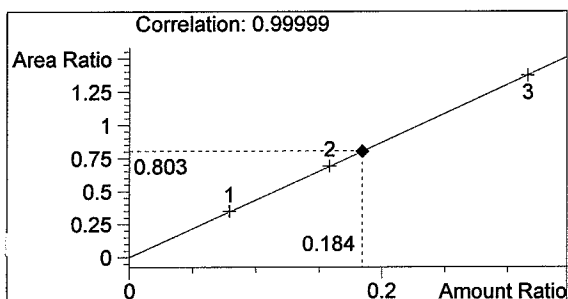
WP MARSHALL

vial # 22

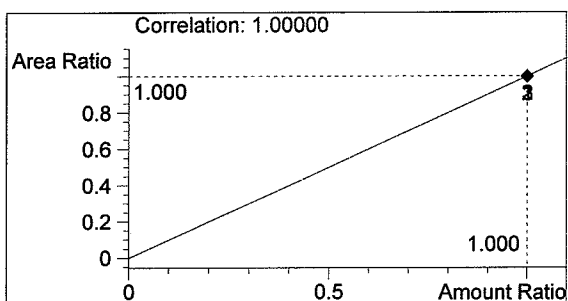


#	Compound	Area	RT
1	ETHANOL	1638	1.092
2	n-PROPANOL	2039	1.859

Totals:



ETHANOL 0.184 g/100mL

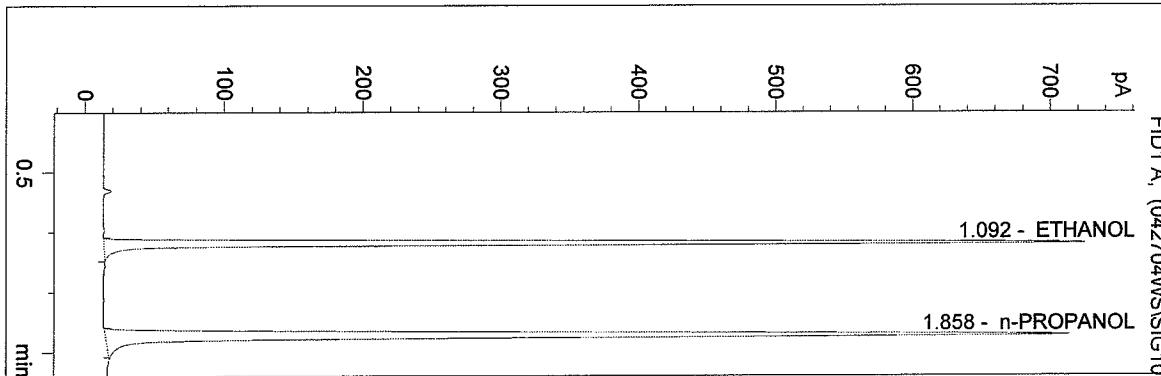


n-PROPANOL 1.000 g/100mL

C:\HPCHEM\1\METHODS\BLDALCO3.M  
 4/27/04 12:15:31 PM  
 Instrument 3  
 PP-A1c2

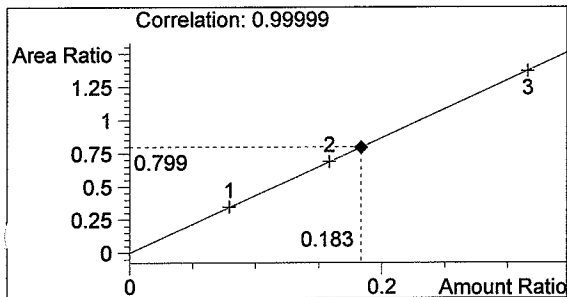
QA 04013  
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vial # 23

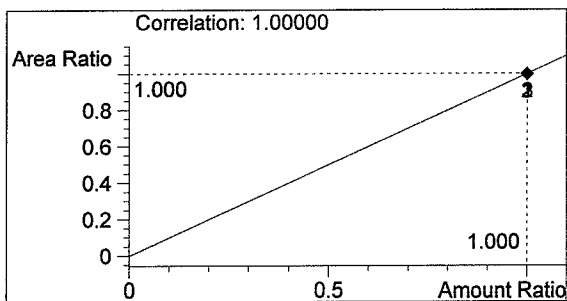


#	Compound	Area	RT
1	ETHANOL	1680	1.092
2	n-PROPANOL	2102	1.858

Totals:



ETHANOL 0.183 g/100mL

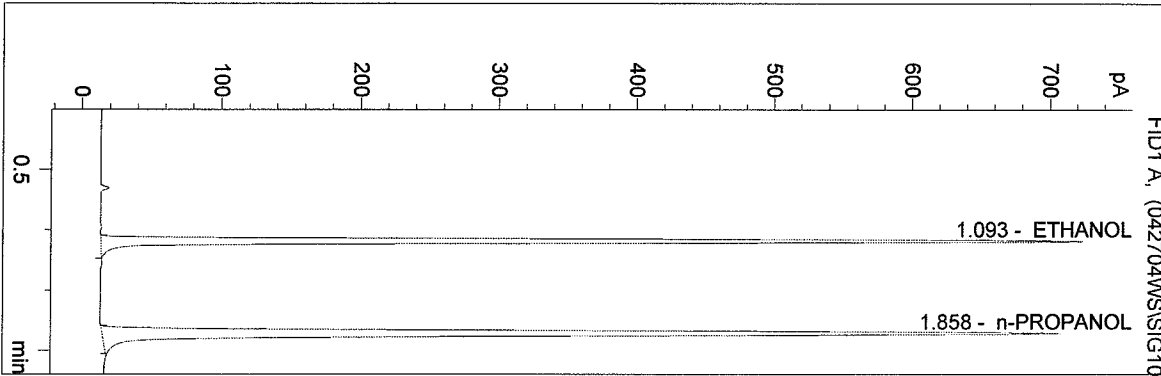


n-PROPANOL 1.000 g/100mL

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 Instrument 3  
 PP-A1c2

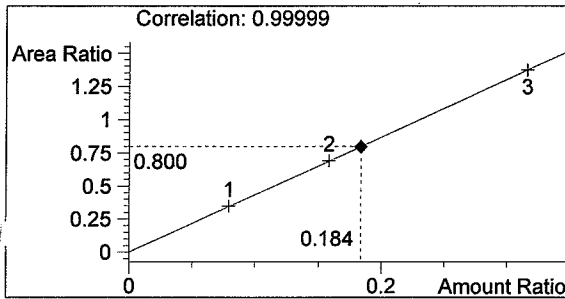
QA 04013  
 WP MARSHALL

vial # 24

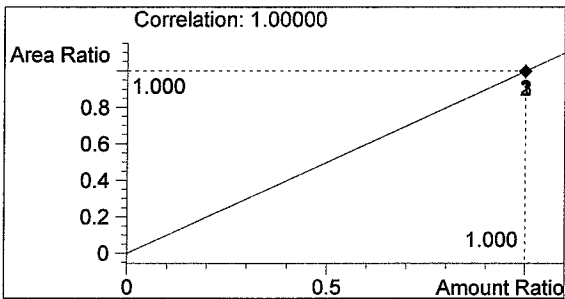


#	Compound	Area	RT
1	ETHANOL	1662	1.093
2	n-PROPANOL	2077	1.858

Totals:



ETHANOL 0.184 g/100mL



n-PROPANOL 1.000 g/100mL

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4/27/04 11:44:07 AM

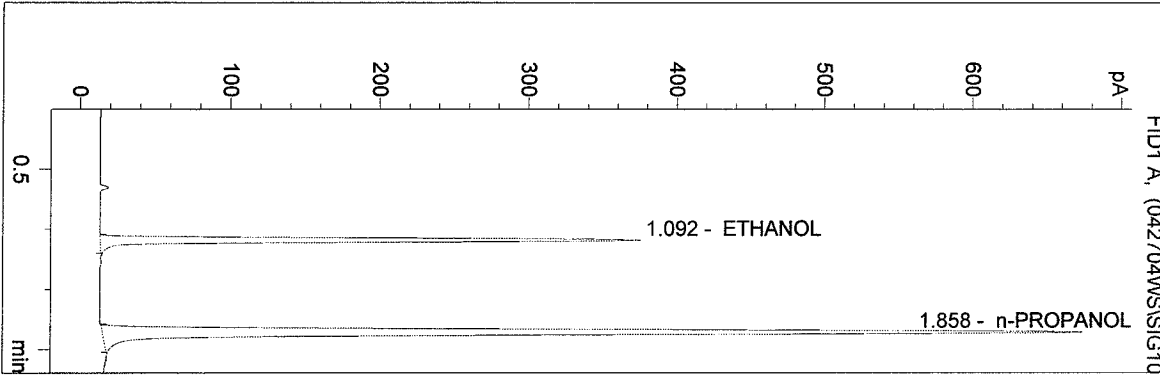
Instrument 3

PC-A1c2

0.10 CONTROL WM

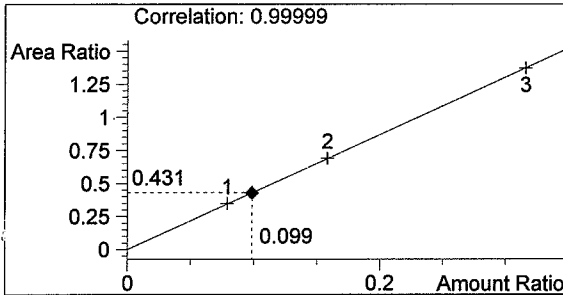
WP MARSHALL

vial # 13

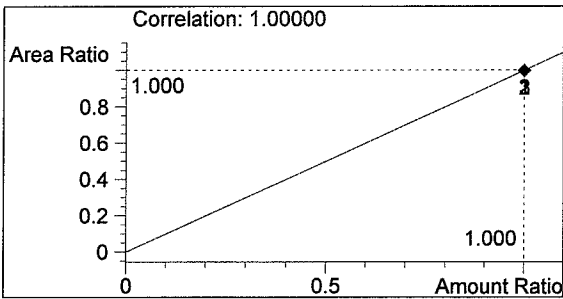


#	Compound	Area	RT
1	ETHANOL	854	1.092
2	n-PROPANOL	1980	1.858

Totals:



ETHANOL 0.099 g/100mL



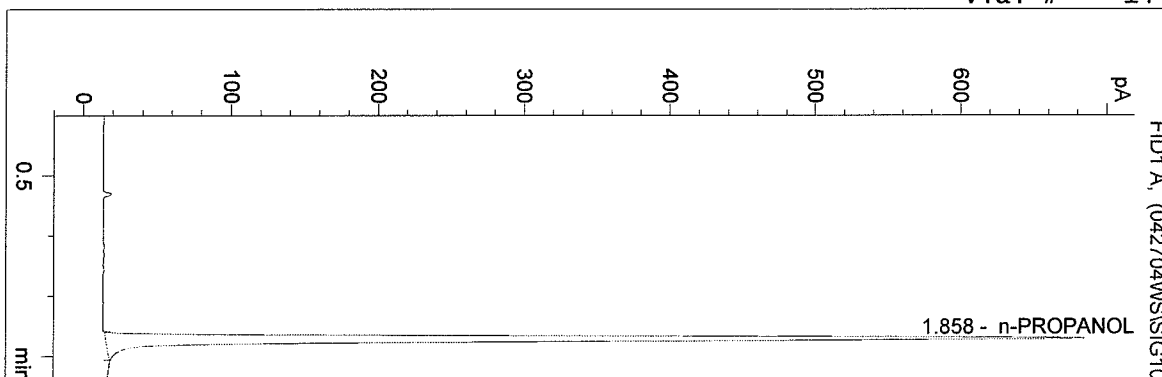
n-PROPANOL 1.000 g/100mL



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 Instrument 3  
 PC-A1c2

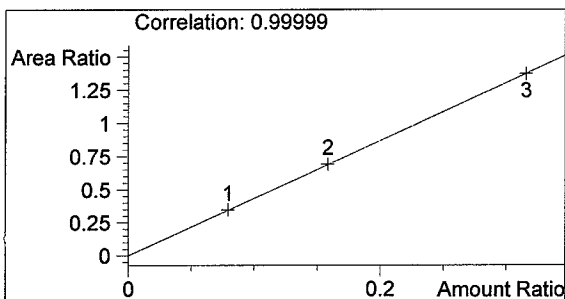
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vial # 14

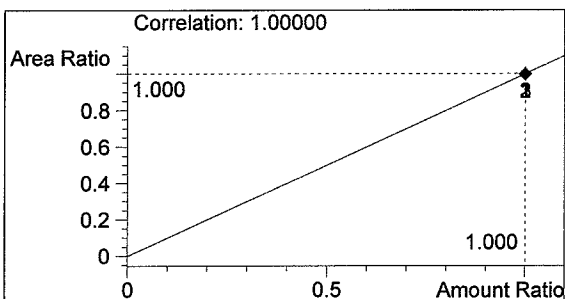


#	Compound	Area	RT
1	ETHANOL	0	0.000
2	n-PROPANOL	2016	1.858

Totals:



ETHANOL 0.000 g/100mL



n-PROPANOL 1.000 g/100mL