

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

Batch number **03007**

Date: 2/13/2003

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	Anal10	Anal 11	Anal 12
1	0.125	0.126	0.126									
2	0.125	0.126	0.126									
3	0.125	0.126	0.127									
4	0.125	0.127	0.126									
5	0.128	0.127	0.126									
Ctrl	0.099	0.100	0.100									

External Control:

Lot #: A021986 Exp date: 01/05

Target concentration: 0.10 g/100mL

Statistics:


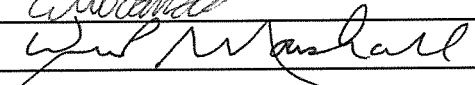
Avg. solution concent.: 0.1261 g/100 mL

SD: 0.00088

Range (3xSD): 0.1234 to 0.1287

Precision CV (%): 0.7010 %

Equivalent vapor concent.: 0.1025 g/210L

Analyst	Name	Signature	Date
1	Ruth Luthi		02/13/03
2	Estuardo J. Miranda		02/13/03
3	William P Marshall		02/18/03
4			
5			
6			
7			
8			
9			
10			
11			
12			

Prepared by: Ruth Luthi according to the approved protocol



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BAC VERIFIER DATAMASTER QUALITY ASSURANCE SOLUTION
CERTIFICATION

I, Ruth Luthi, 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 twenty-two years of experience in analytical chemistry, and eighteen years of experience in the Washington State Toxicology Laboratory.

The quality assurance solution, Lot Number 03007, was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.1261 grams per 100ml.

Dated: 2/24/03
Seattle, WA

Ruth Luthi
Forensic Toxicologist

RL/bf
RLQA



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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 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 03007 was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.1261 grams per 100ml.

Dated: 2/24/03

Seattle, WA

Estuardo J. Miranda
Forensic Toxicologist

EM/bf
EMQA





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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 twenty-nine years of analytical laboratory experience including thirteen years of toxicology experience.

The quality assurance solution, Lot Number 03007 was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.1261 grams per 100ml.

Dated: 2/24/03
Seattle, WA



William P. Marshall
Forensic Toxicologist

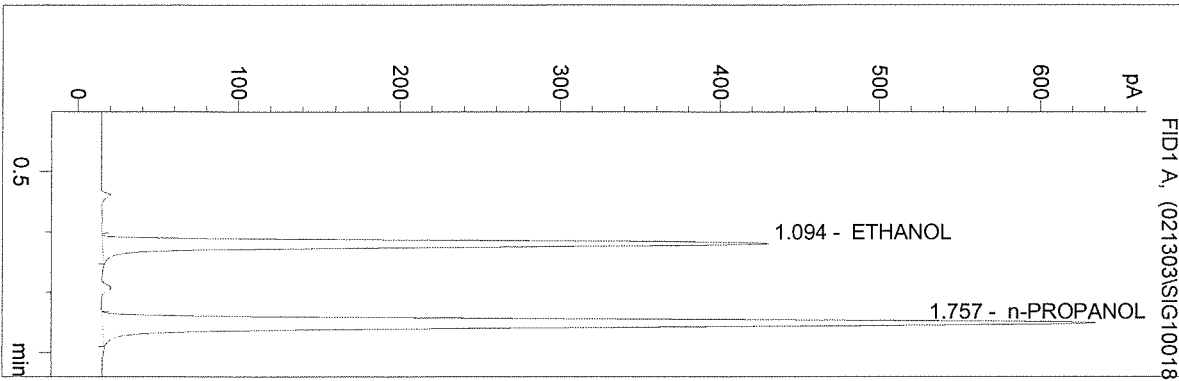
WM/bf
WMQA

WASHINGTON STATE TOXICOLOGY LABORATORY

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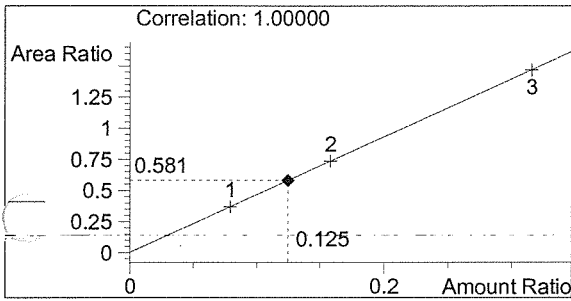
03007 0.10 QA
 RUTH LUTHI

vial # 18

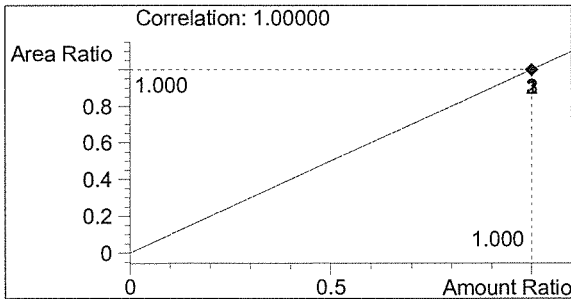


#	Compound	Area	RT
1	ETHANOL	1641	1.094
2	n-PROPANOL	2822	1.757

Totals:



ETHANOL 0.125 g/100mL



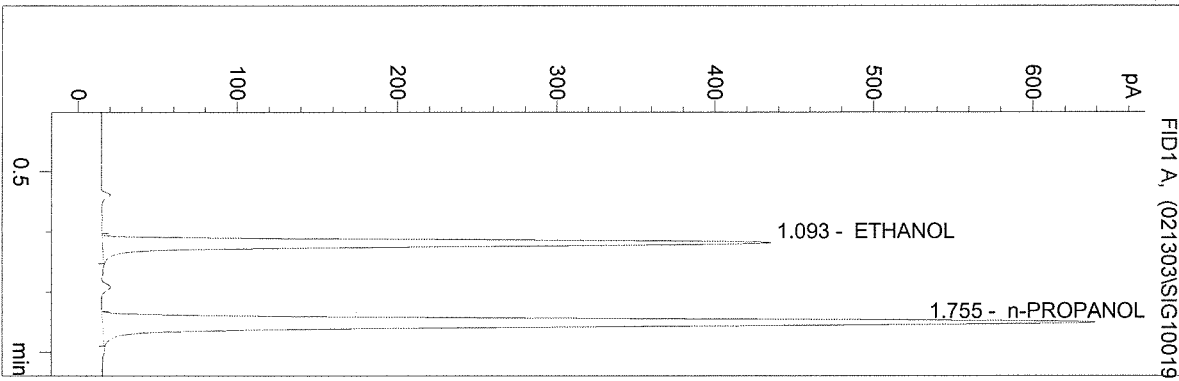
n-PROPANOL 1.000 g/100mL

WASHINGTON STATE TOXICOLOGY LABORATORY

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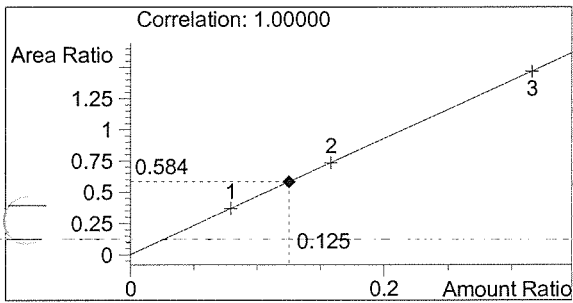
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 RUTH LUTHI

vial # 19

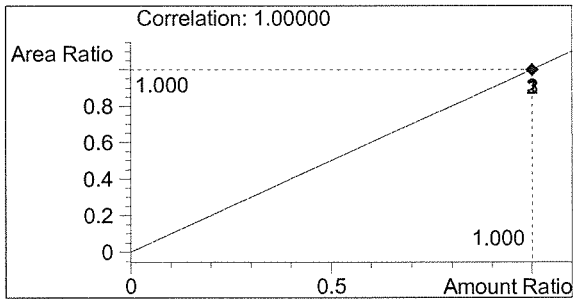


#	Compound	Area	RT
1	ETHANOL	1654	1.093
2	n-PROPANOL	2833	1.755

Totals:



ETHANOL 0.125 g/100mL



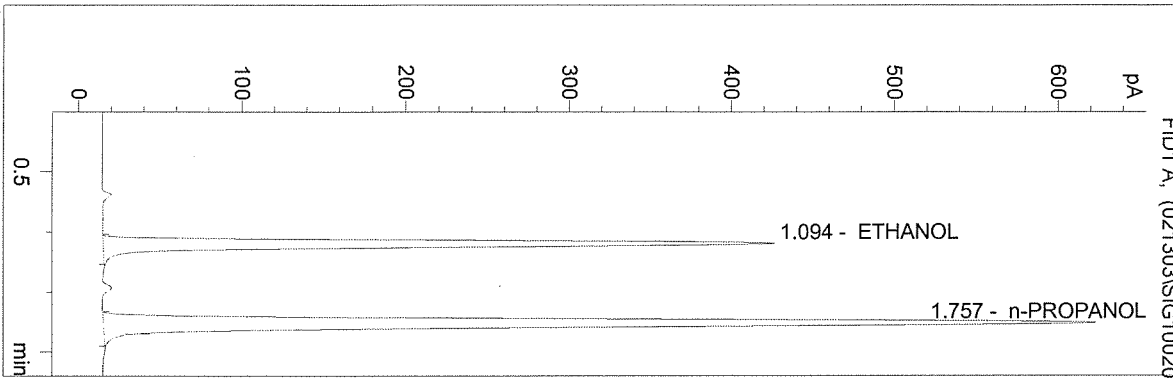
n-PROPANOL 1.000 g/100mL

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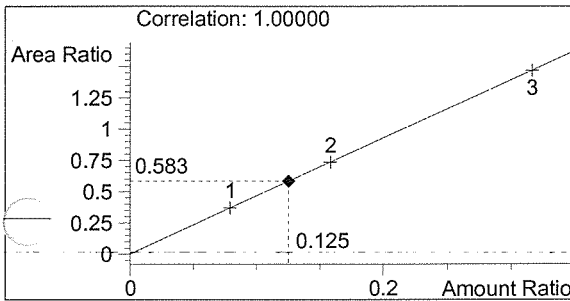
03007 0.10 QA
 RUTH LUTHI

vial # 20

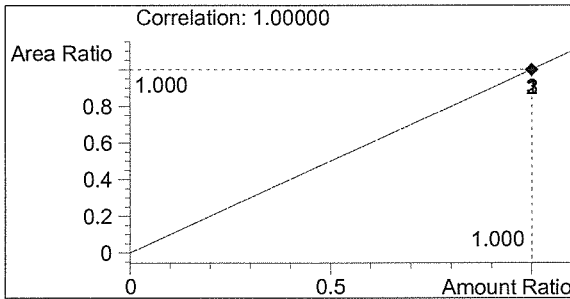


#	Compound	Area	RT
1	ETHANOL	1604	1.094
2	n-PROPANOL	2750	1.757

Totals:



ETHANOL 0.125 g/100mL

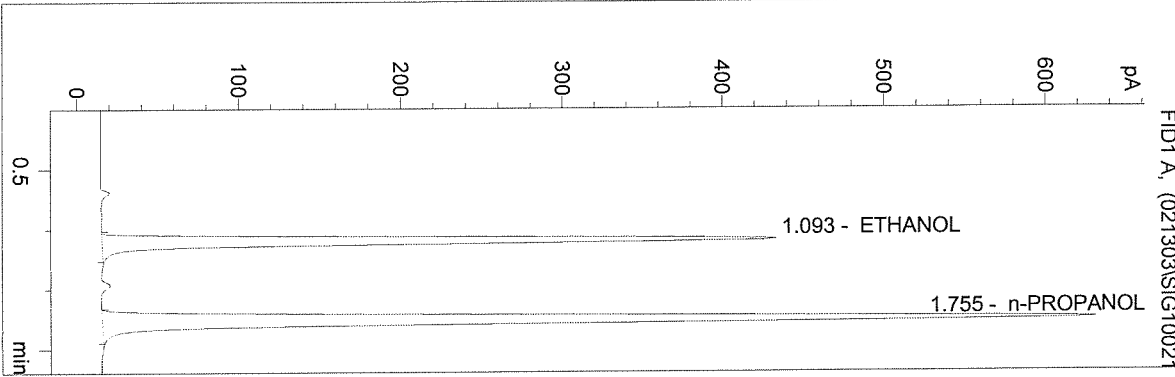


n-PROPANOL 1.000 g/100mL

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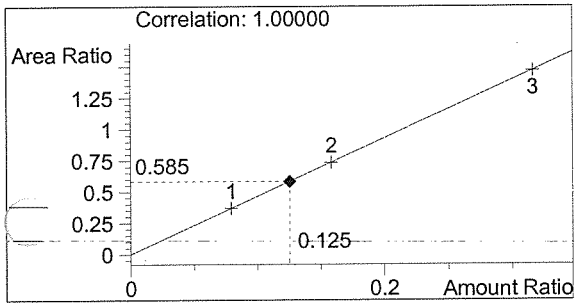
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03007 0.10 QA
 RUTH LUTHI
 vial # 21

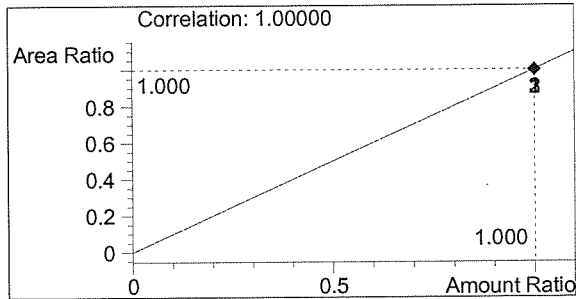


#	Compound	Area	RT
1	ETHANOL	1626	1.093
2	n-PROPANOL	2781	1.755

Totals:



ETHANOL 0.125 g/100mL



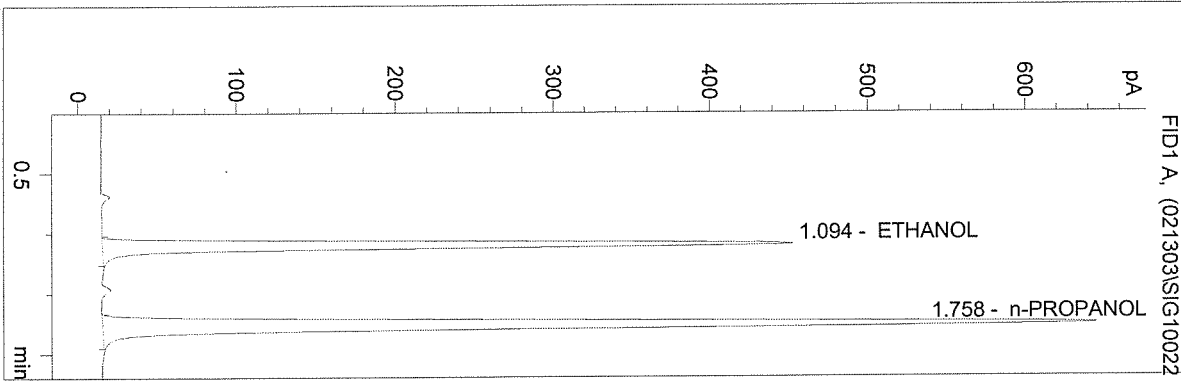
n-PROPANOL 1.000 g/100mL

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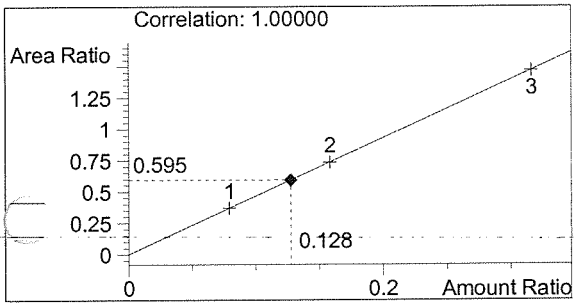
03007 0.10 QA
 RUTH LUTHI

vial # 22

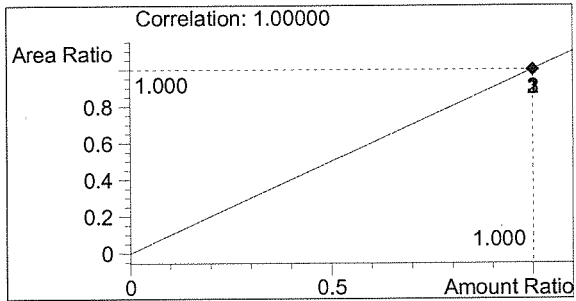


#	Compound	Area	RT
1	ETHANOL	1686	1.094
2	n-PROPANOL	2834	1.758

Totals:



ETHANOL 0.128 g/100mL



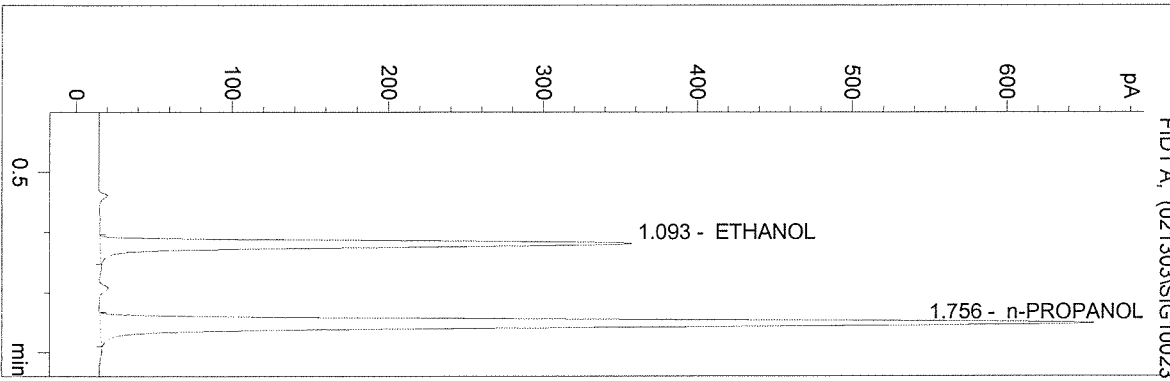
n-PROPANOL 1.000 g/100mL

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 DB-ALC1

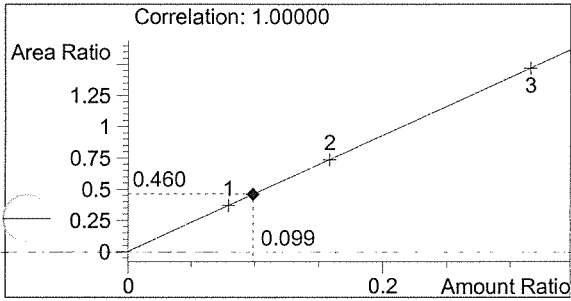
0.100 CTRL
 RUTH LUTHI

vial # 23

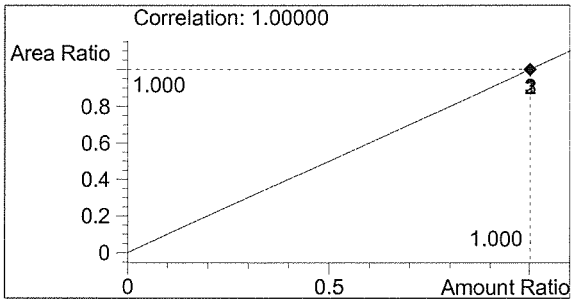


#	Compound	Area	RT
1	ETHANOL	1331	1.093
2	n-PROPANOL	2892	1.756

Totals:



ETHANOL 0.099 g/100mL



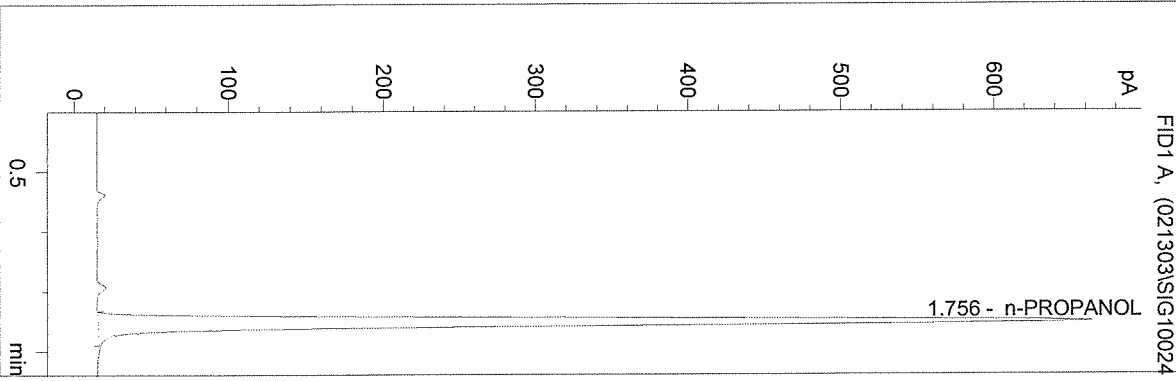
n-PROPANOL 1.000 g/100mL

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DB-ALC1

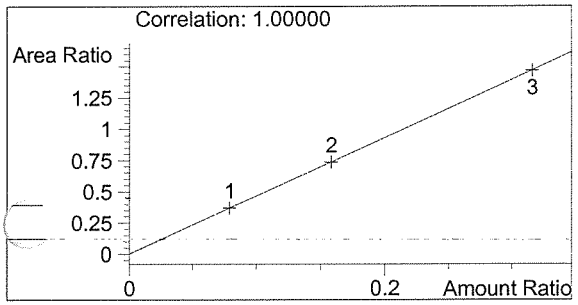
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RUTH LUTHI

vial # 24

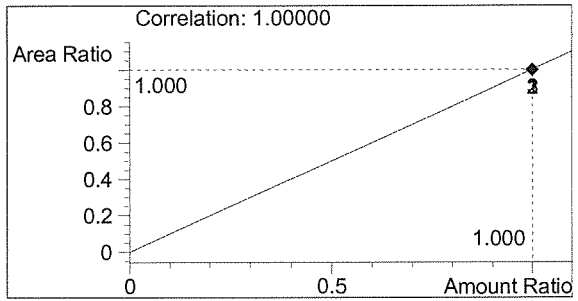


#	Compound	Area	RT
1	ETHANOL	0	0.000
2	n-PROPANOL	2935	1.756

Totals:



ETHANOL 0.000 g/100mL

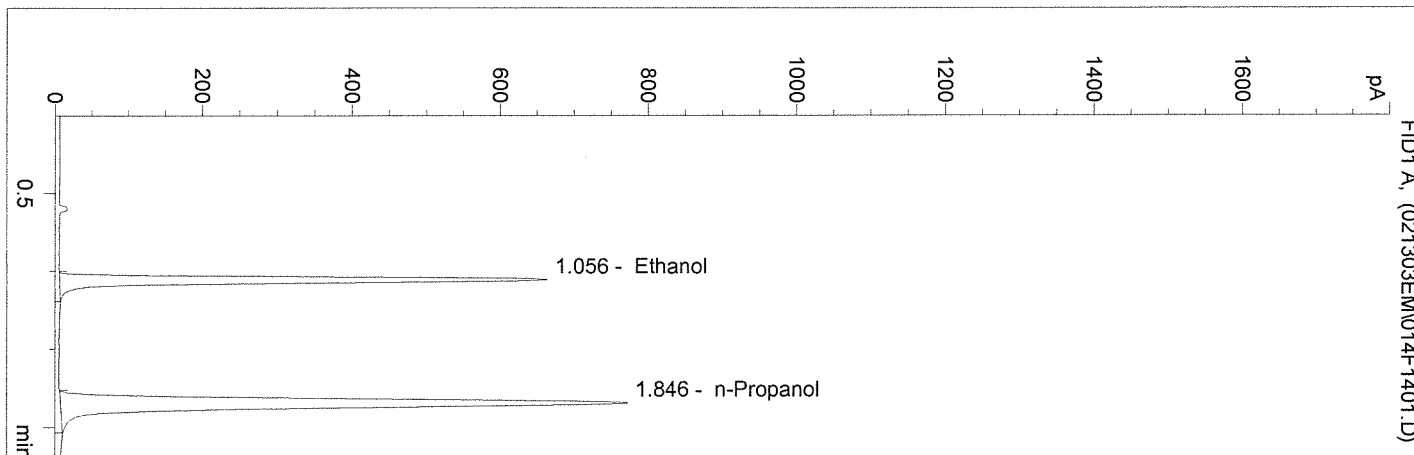


n-PROPANOL 1.000 g/100mL

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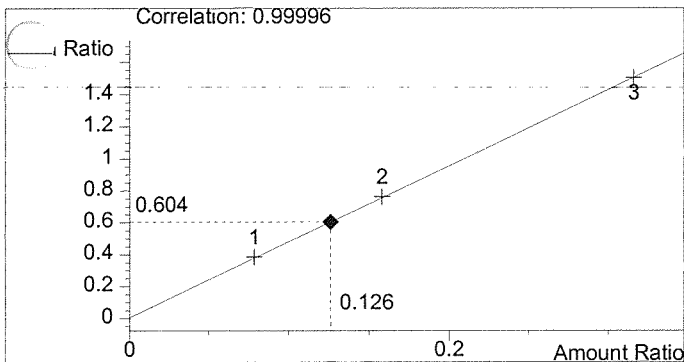
Q.A. Sol. 03007
 Estuardo J. Miranda

vial # 14

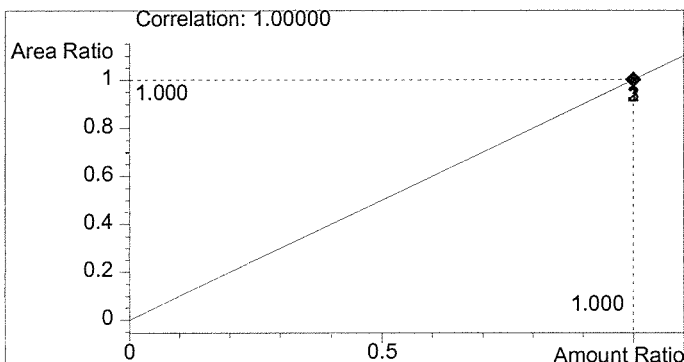


#	Compound	Area	RT
1	Ethanol	1789	1.056
2	n-Propanol	2961	1.846

Totals:



Ethanol 0.126 g/100ml



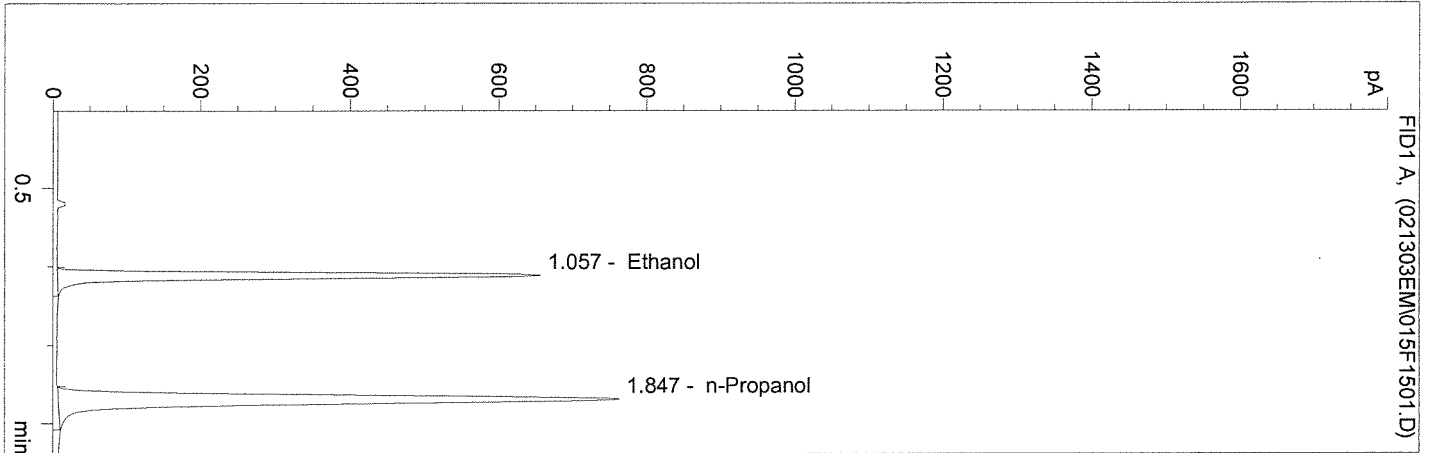
n-Propanol 1.000 g/100ml

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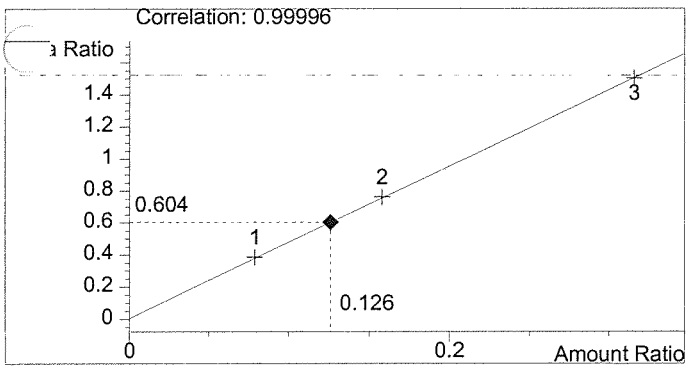
Q.A. Sol. 03007
 Estuardo J. Miranda

vial # 15

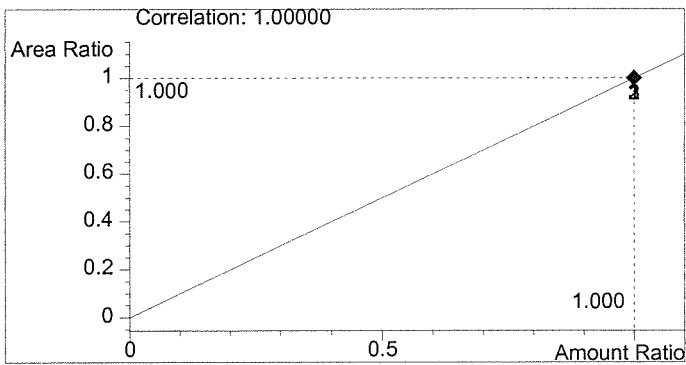


#	Compound	Area	RT
1	Ethanol	1766	1.057
2	n-Propanol	2922	1.847

Totals:



Ethanol 0.126 g/100ml



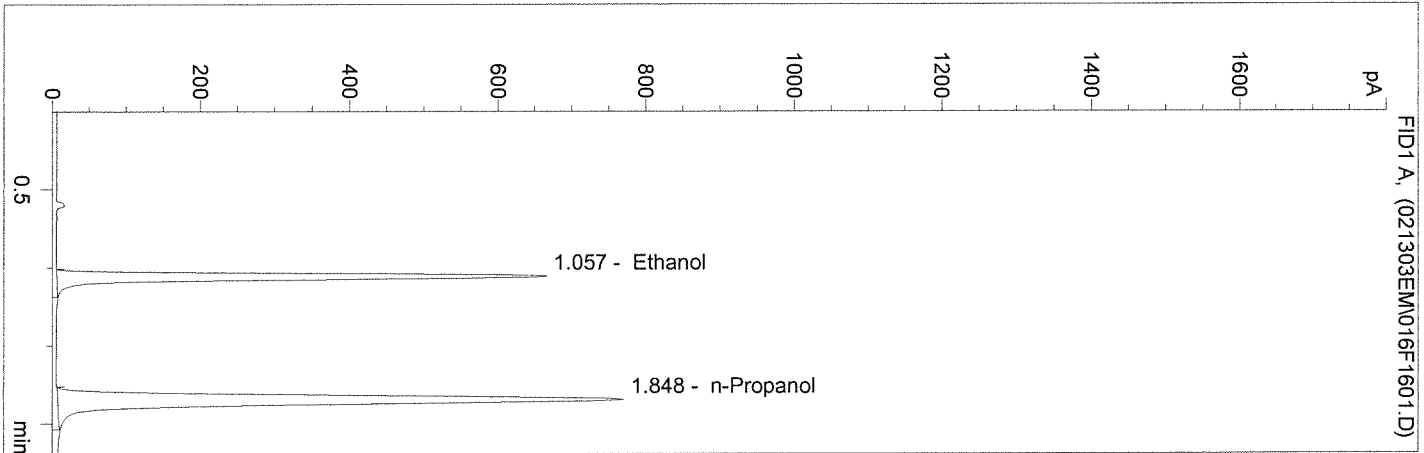
n-Propanol 1.000 g/100ml

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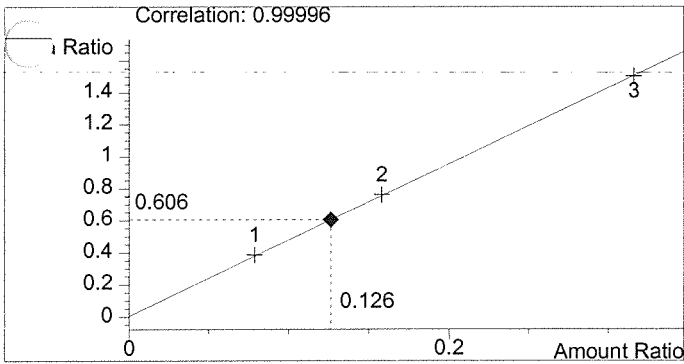
Q.A. Sol. 03007
 Estuardo J. Miranda

vial # 16

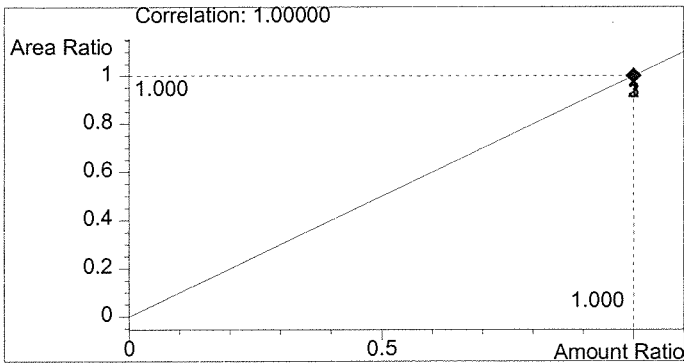


#	Compound	Area	RT
1	Ethanol	1788	1.057
2	n-Propanol	2949	1.848

Totals:



Ethanol 0.126 g/100ml



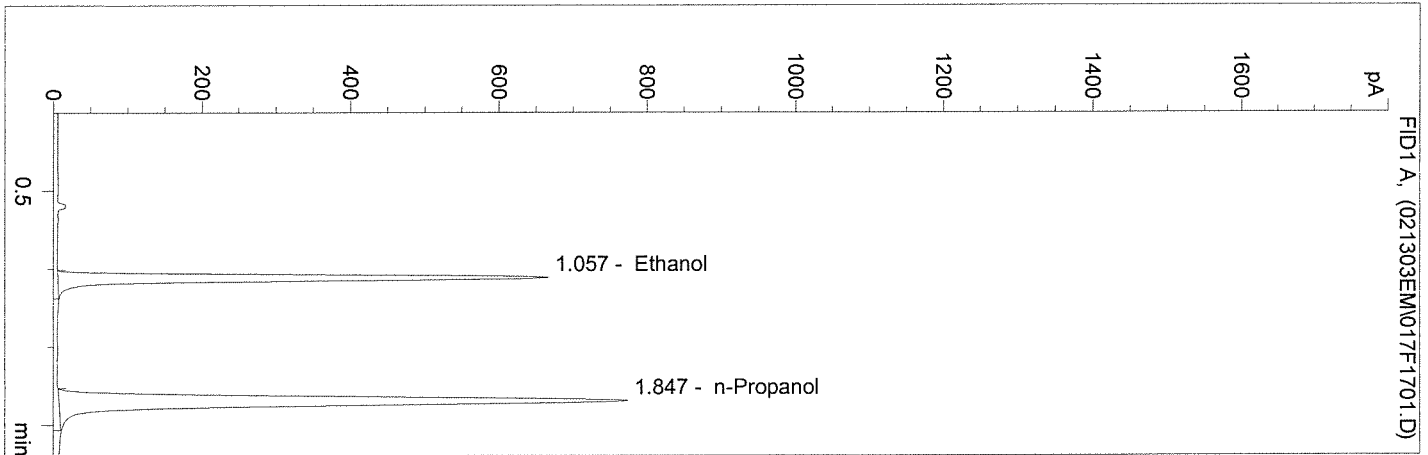
n-Propanol 1.000 g/100ml

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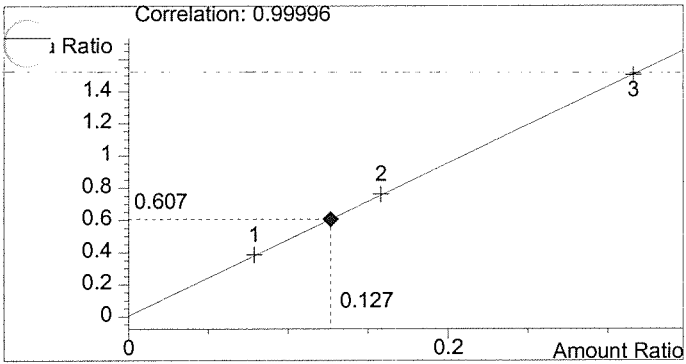
Q.A. Sol. 03007
 Estuardo J. Miranda

vial # 17

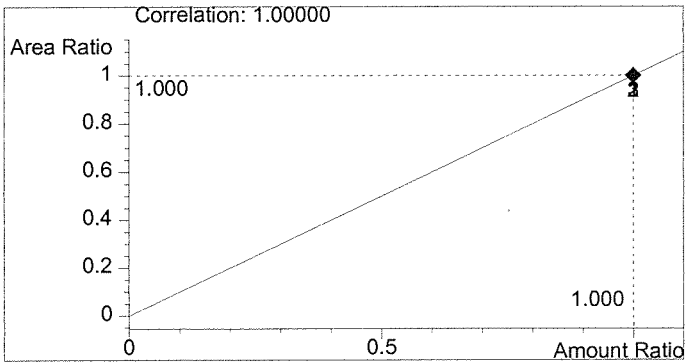


#	Compound	Area	RT
1	Ethanol	1794	1.057
2	n-Propanol	2957	1.847

Totals:



Ethanol 0.127 g/100ml



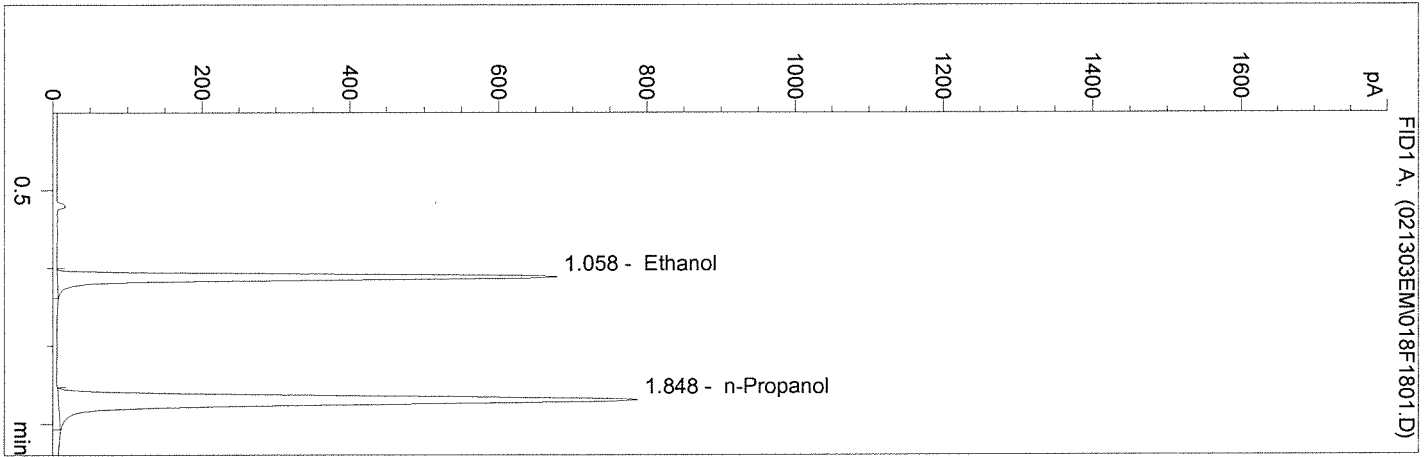
n-Propanol 1.000 g/100ml

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 -ALC1

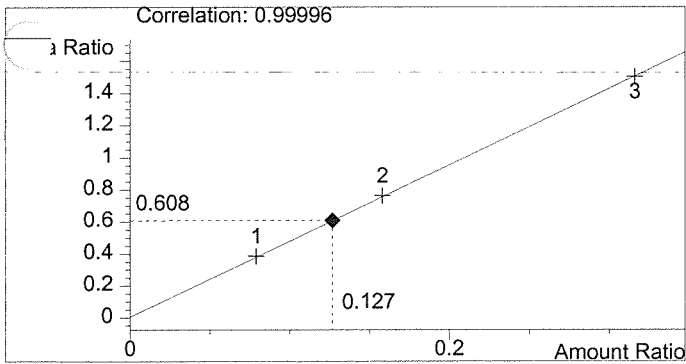
Q.A. Sol. 03007
 Estuardo J. Miranda

vial # 18

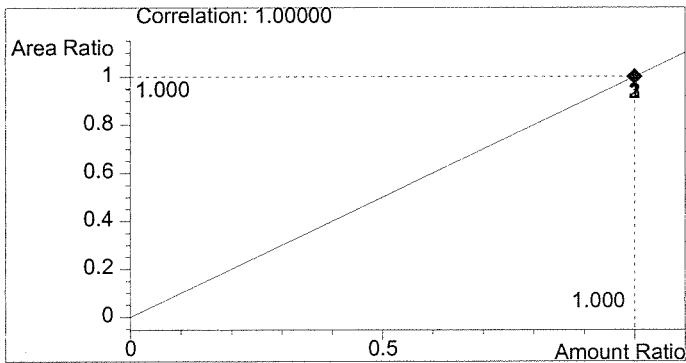


#	Compound	Area	RT
1	Ethanol	1829	1.058
2	n-Propanol	3009	1.848

Totals:



Ethanol 0.127 g/100ml

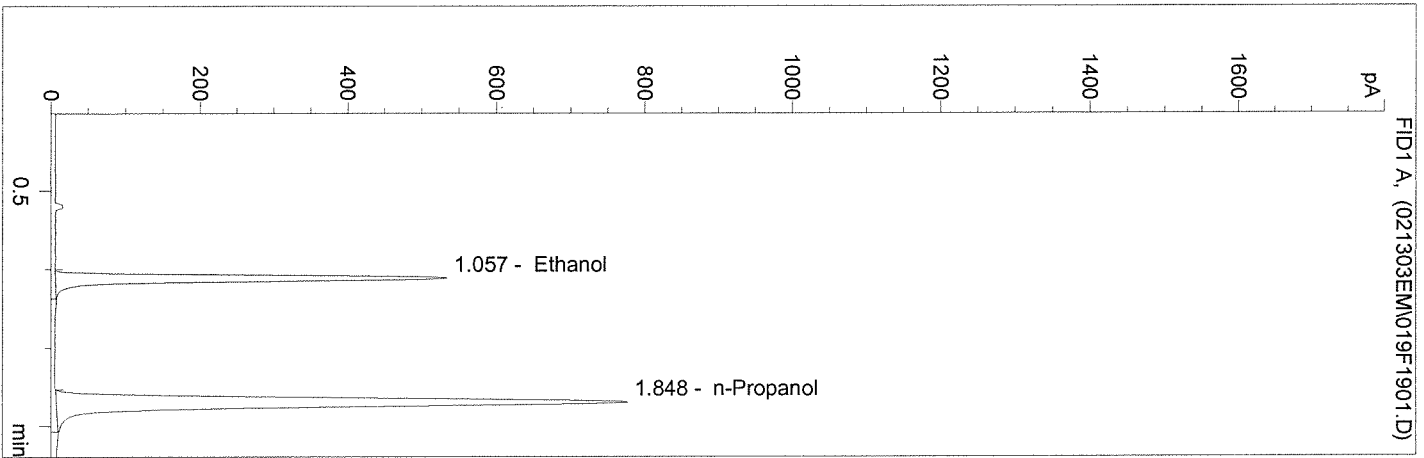


n-Propanol 1.000 g/100ml

WASHINGTON STATE TOXICOLOGY LABORATORY

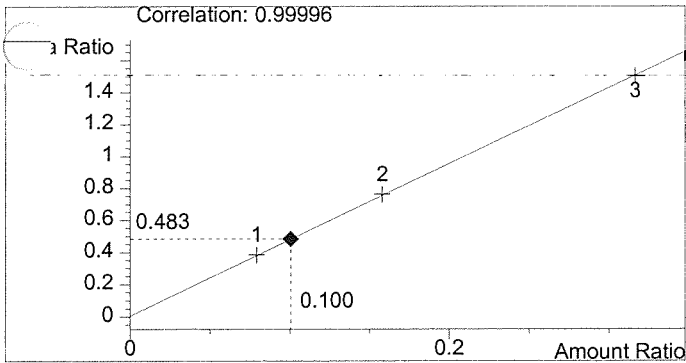
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 Estuardo J. Miranda
 vial # 19

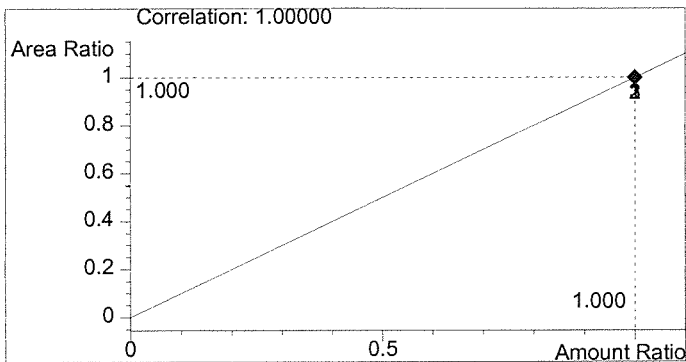


#	Compound	Area	RT
1	Ethanol	1440	1.057
2	n-Propanol	2981	1.848

Totals:



Ethanol 0.100 g/100ml



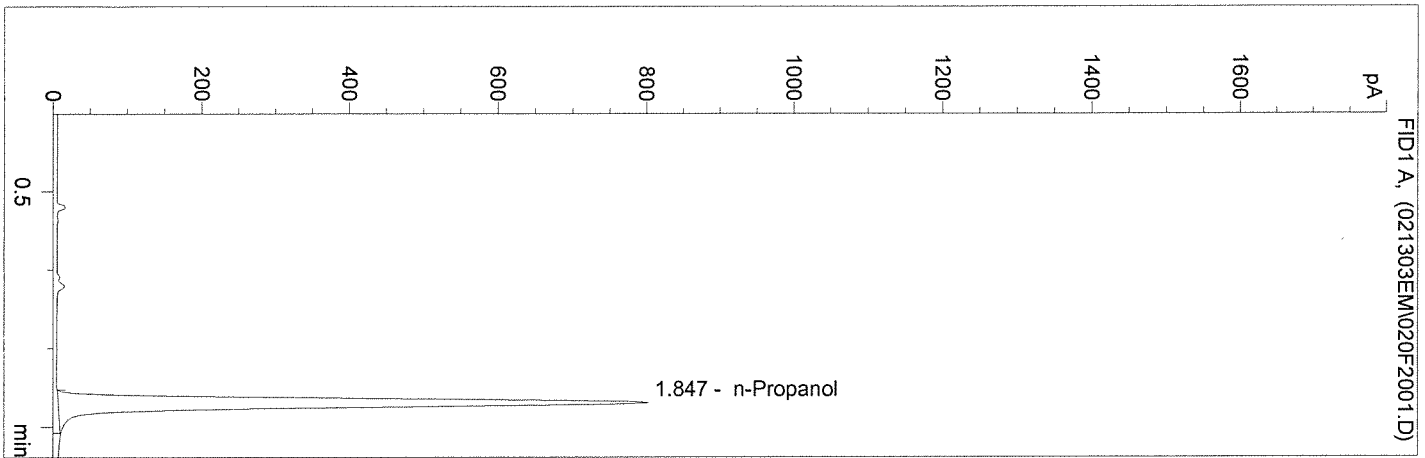
n-Propanol 1.000 g/100ml

WASHINGTON STATE TOXICOLOGY LABORATORY

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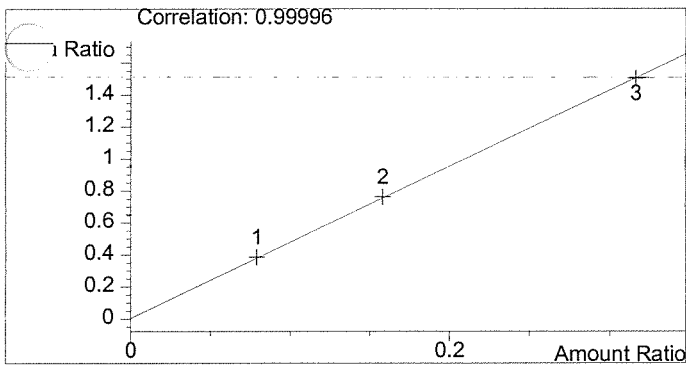
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 Estuardo J. Miranda

vial # 20

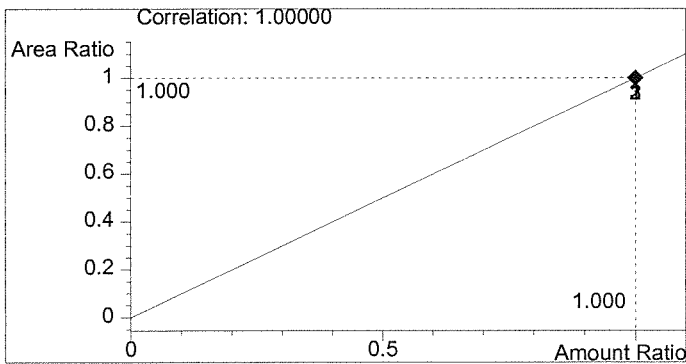


#	Compound	Area	RT
1	Ethanol	0	0.000
2	n-Propanol	3072	1.847

Totals:



Ethanol 0.000 g/100ml



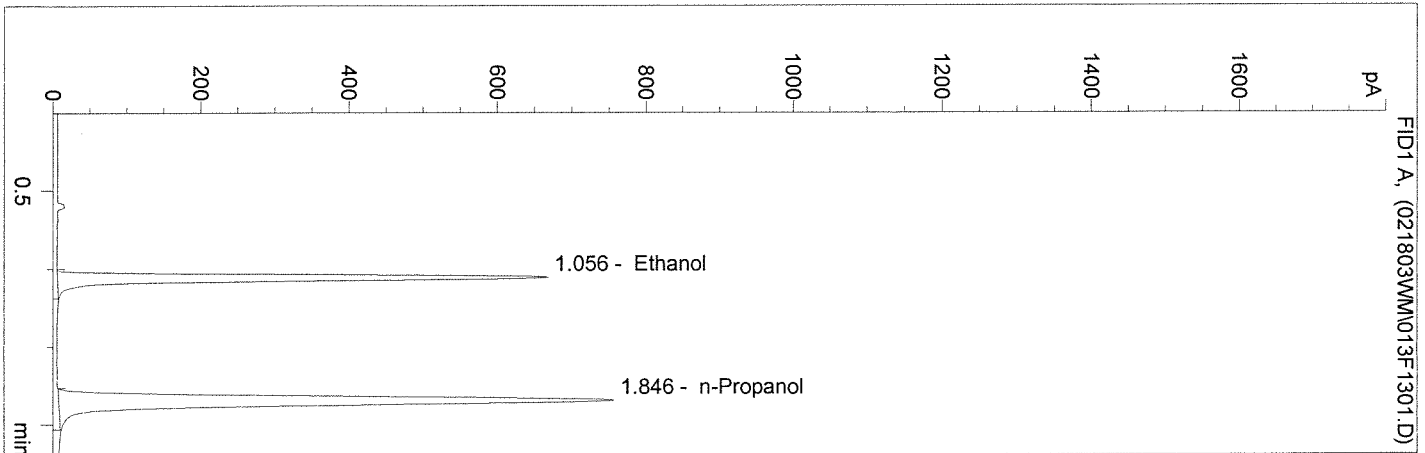
n-Propanol 1.000 g/100ml

WASHINGTON STATE TOXICOLOGY LABORATORY

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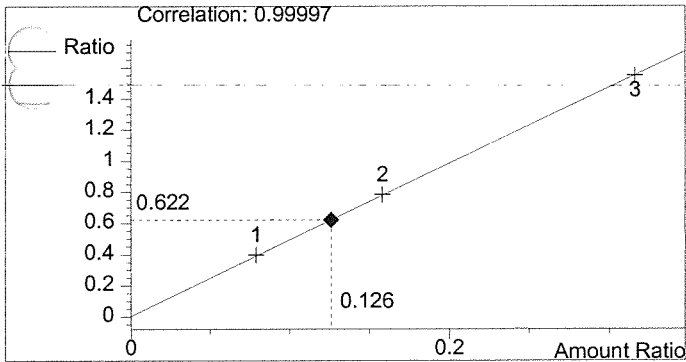
QA 03007
 WP MARSHALL

vial # 13

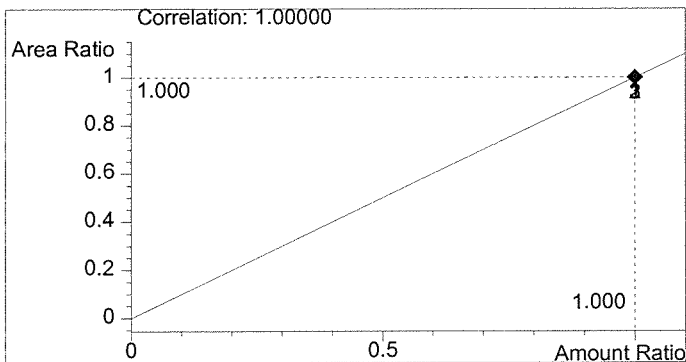


#	Compound	Area	RT
1	Ethanol	1805	1.056
2	n-Propanol	2902	1.846

Totals:



Ethanol 0.126 g/100ml



n-Propanol 1.000 g/100ml

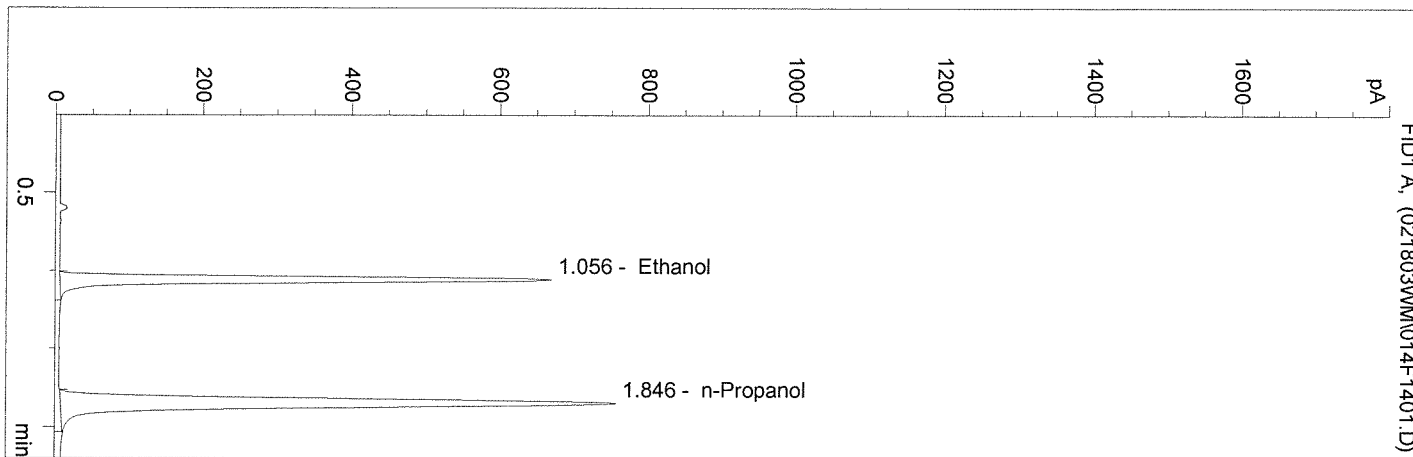
STDS
 031042

WASHINGTON STATE TOXICOLOGY LABORATORY

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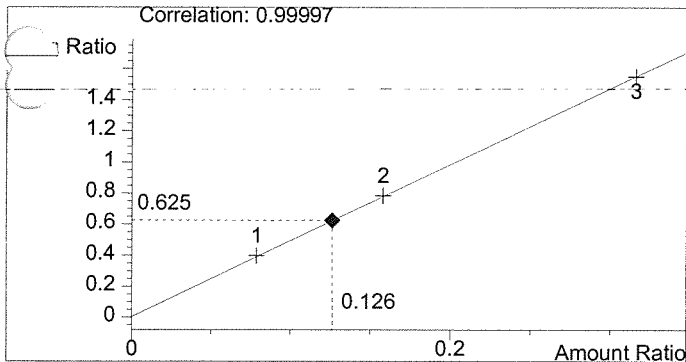
QA 03007
 WP MARSHALL

vial # 14

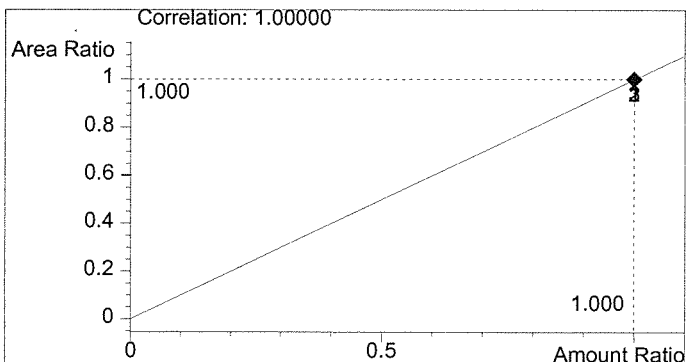


#	Compound	Area	RT
1	Ethanol	1810	1.056
2	n-Propanol	2897	1.846

Totals:



Ethanol 0.126 g/100ml



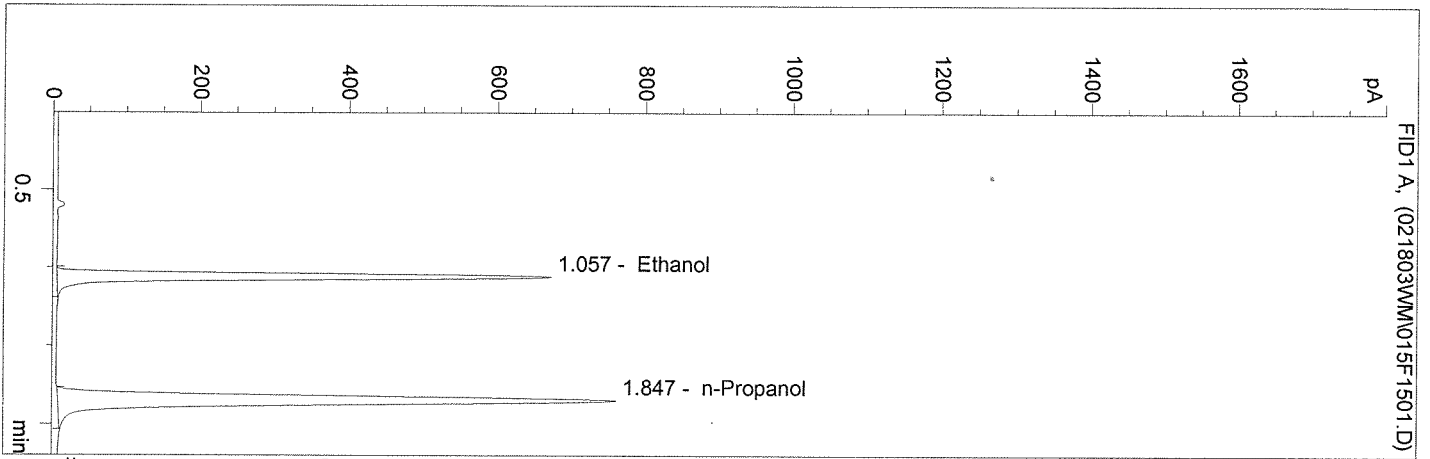
n-Propanol 1.000 g/100ml

WASHINGTON STATE TOXICOLOGY LABORATORY

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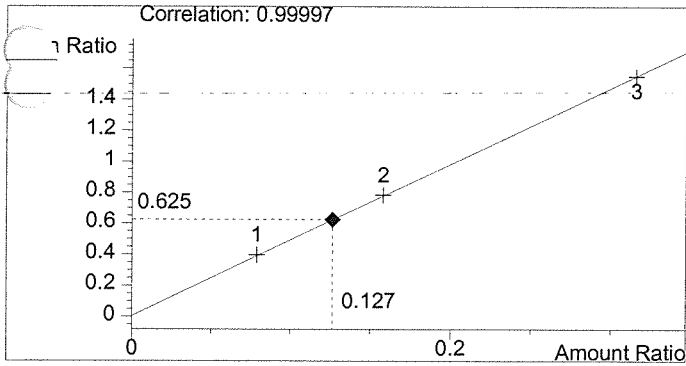
QA 03007
 WP MARSHALL

vial # 15

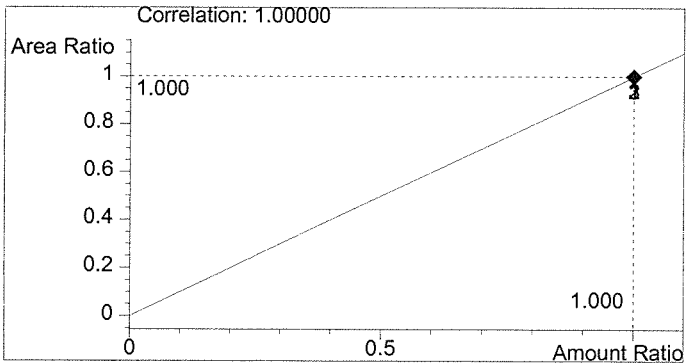


#	Compound	Area	RT
1	Ethanol	1818	1.057
2	n-Propanol	2908	1.847

Totals:



Ethanol 0.127 g/100ml



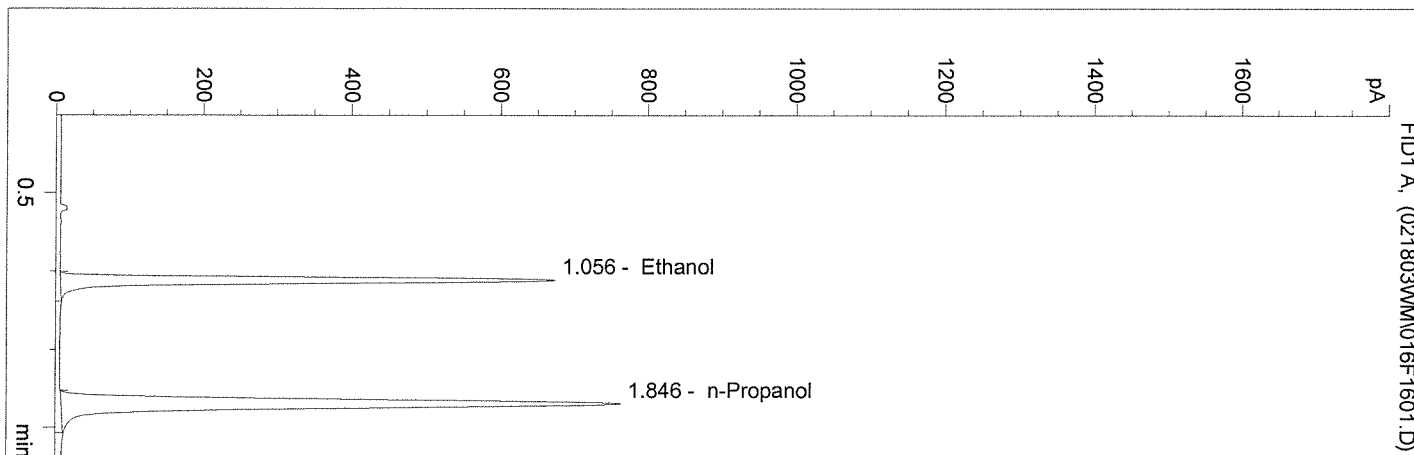
n-Propanol 1.000 g/100ml

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C:\HPCHEM\2\METHODS\BLDALCO2.M
 2/18/03 12:57:14 PM
 Instrument 2
 -ALC1

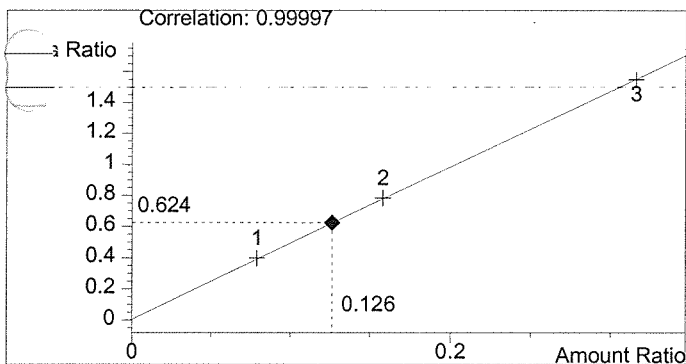
QA 03007
 WP MARSHALL

vial # 16

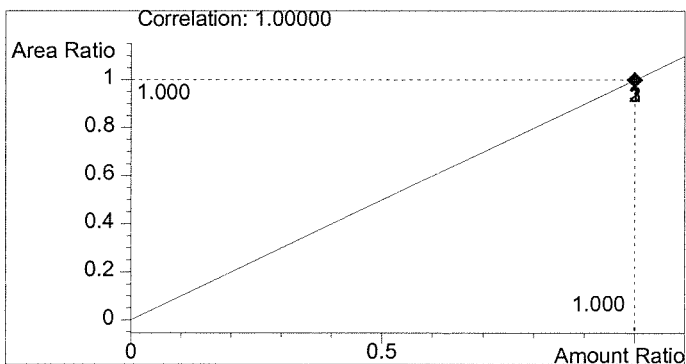


#	Compound	Area	RT
1	Ethanol	1828	1.056
2	n-Propanol	2927	1.846

Totals:



Ethanol 0.126 g/100ml



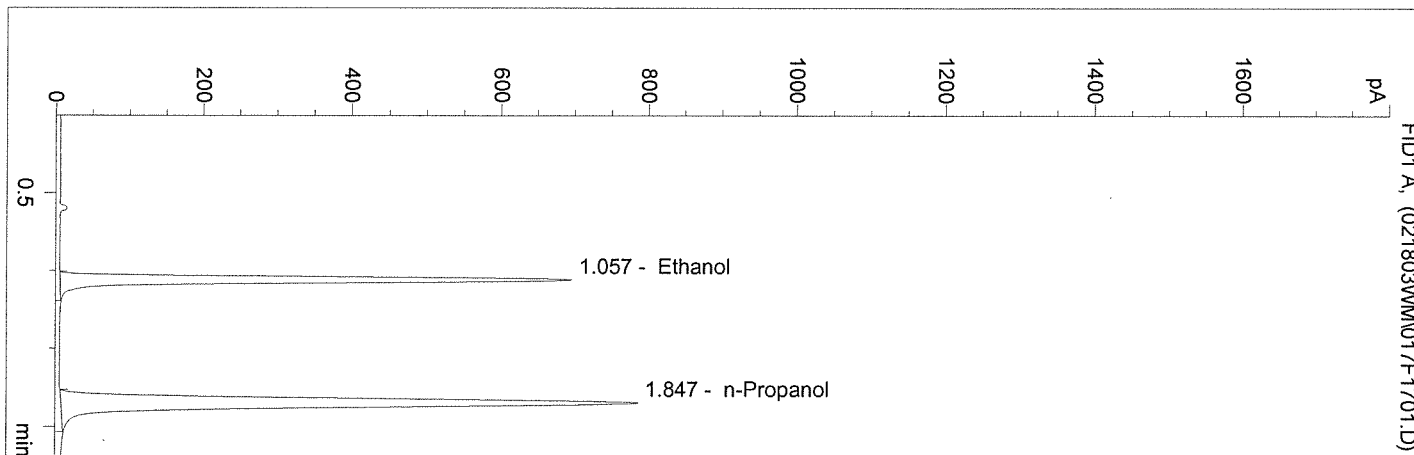
n-Propanol 1.000 g/100ml

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C:\HPCHEM\2\METHODS\BLDALCO2.M
 2/18/03 1:00:39 PM
 Instrument 2
 -ALC1

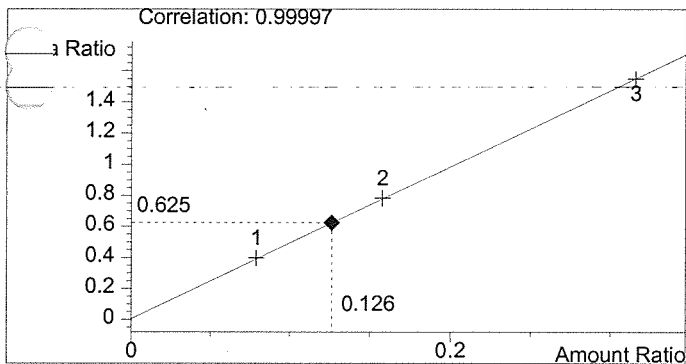
QA 03007
 WP MARSHALL

vial # 17

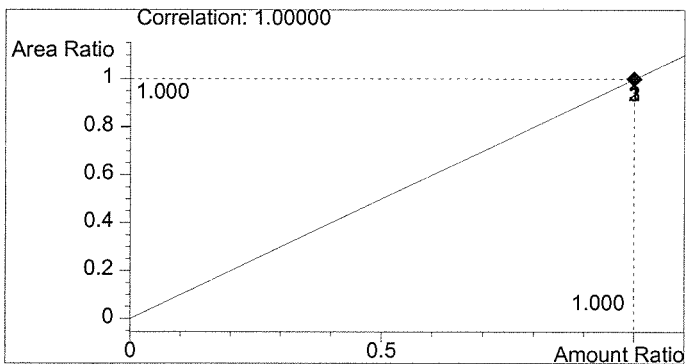


#	Compound	Area	RT
1	Ethanol	1879	1.057
2	n-Propanol	3008	1.847

Totals:



Ethanol 0.126 g/100ml



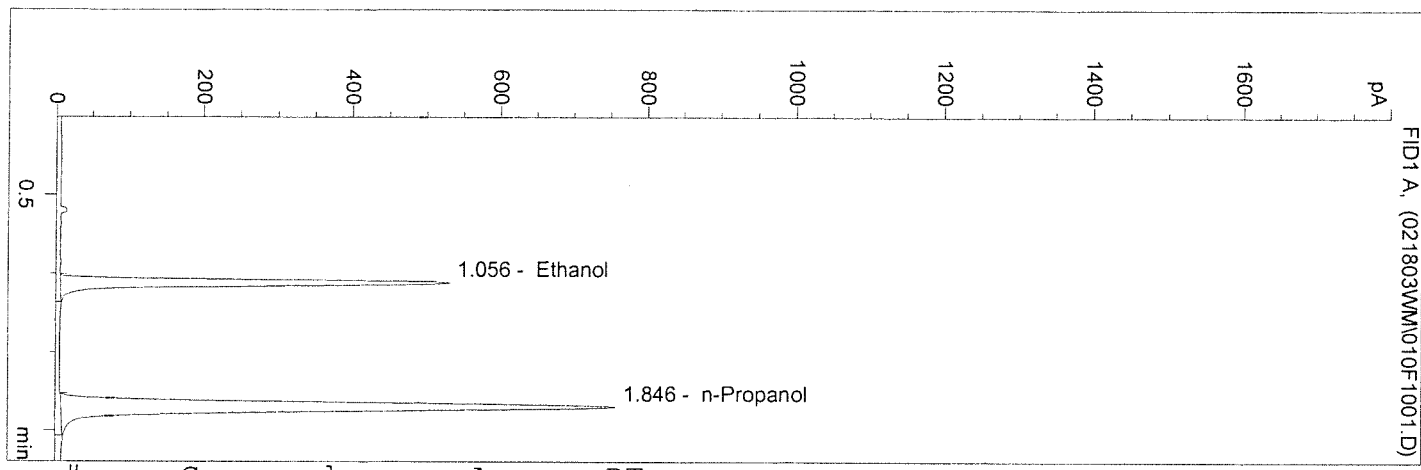
n-Propanol 1.000 g/100ml

WASHINGTON STATE TOXICOLOGY LABORATORY

C:\HPCHEM\2\METHODS\BLDALCO2.M
 2/18/03 12:38:44 PM
 Instrument 2
 -ALC1

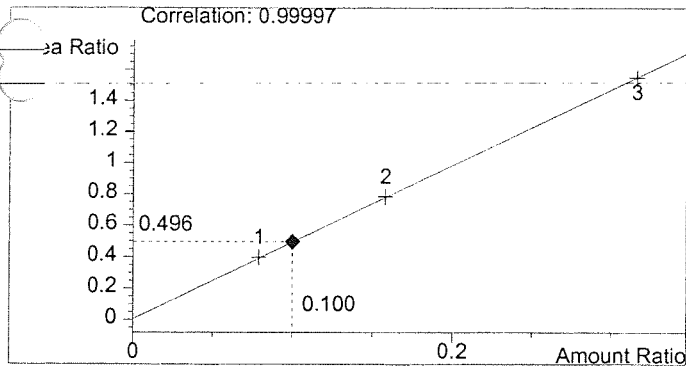
CONTROL 0.10 WM
 WP MARSHALL

vial # 10

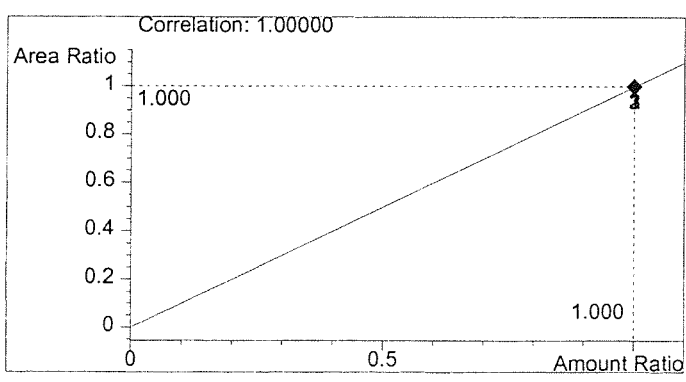


#	Compound	Area	RT
1	Ethanol	1443	1.056
2	n-Propanol	2908	1.846

Totals:



Ethanol 0.100 g/100ml



n-Propanol 1.000 g/100ml