

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** Date: 6/6/2003
 Job number **03016**

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	0.128	0.130	0.126									
2	0.128	0.130	0.127									
3	0.129	0.131	0.127									
4	0.128	0.130	0.127									
5	0.128	0.130	0.127									
Ctrl	0.100	0.102	0.099									

External Control:
 Lot #: A022167 Exp date: 01/05
 Target concentration: 0.10 g/100mL

Statistics:
 Avg. solution concent.: 0.1284 g/100 mL
 SD: 0.00150
 Range (3xSD): 0.1239 to 0.1329
 Precision CV (%): 1.1701 %

Equivalent vapor concent.: 0.1044 g/210L

Analyst	Name	Signature	Date
1	William P Marshall	<i>William P Marshall</i>	06/06/03
2	Estuardo J. Miranda	<i>Estuardo J. Miranda</i>	06/06/03
3	Eugene Schwilke	<i>Eugene Schwilke</i>	06/09/03
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12			

Prepared by: William P Marshall according to the approved protocol



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

BAC VERIFIER DATAMASTER QUALITY ASSURANCE SOLUTION
CERTIFICATION


I, 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 03016 was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.1284 grams per 100ml.

Dated: 6/16/03
Seattle, WA


William P. Marshall
Forensic Toxicologist

WM/bf
WMQA



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BAC VERIFIER DATAMASTER QUALITY ASSURANCE SOLUTION
CERTIFICATION

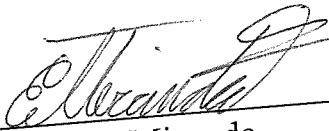
I, Estuardo J. Miranda, do certify under penalty of perjury as follows:

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 03016 was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.1284 grams per 100ml.

Dated: 6/16/03
Seattle, WA



Estuardo J. Miranda
Forensic Toxicologist

EM/bf
EMQA





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BAC VERIFIER DATAMASTER QUALITY ASSURANCE SOLUTION
CERTIFICATION

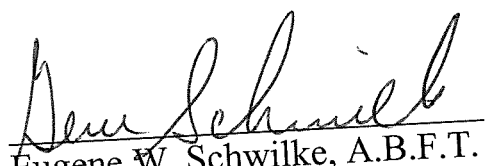
I, Eugene W. Schwilke, do certify under penalty of perjury as follows:

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, Board Certification from the American Board of Forensic Toxicology, and six years of experience in the Washington State Toxicology Laboratory.

The quality assurance solution, Lot Number 03016 was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.1284 grams per 100ml.

Dated: 6/16/03
Seattle, WA


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

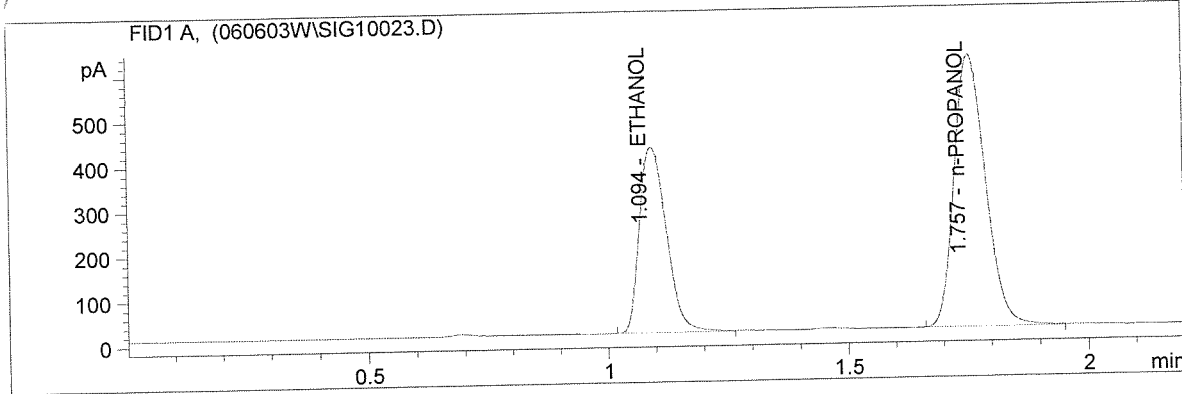
GS/bf
GSQA



HPCHEM\1\METHODS\BLDALCO3.M
 /03 3:50:40 PM
 trument 3
 ALC1

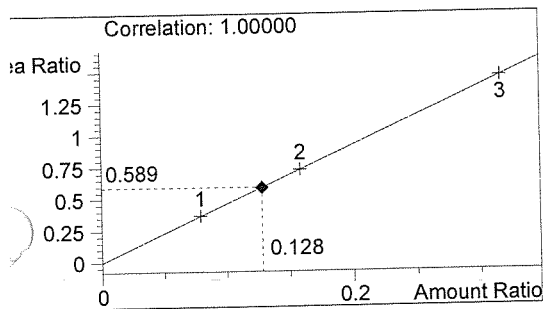
QA 03016 .10
 WP MARSHALL

vial # 23

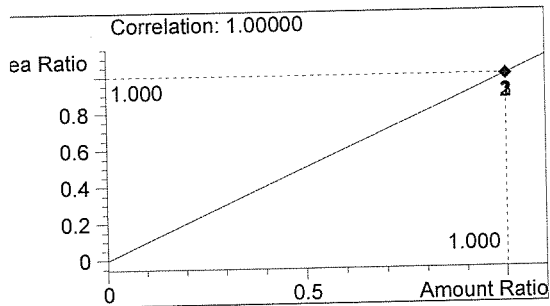


#	Compound	Area	RT
1	ETHANOL	1627	1.094
2	n-PROPANOL	2761	1.757

Totals:



ETHANOL 0.128 g/100mL

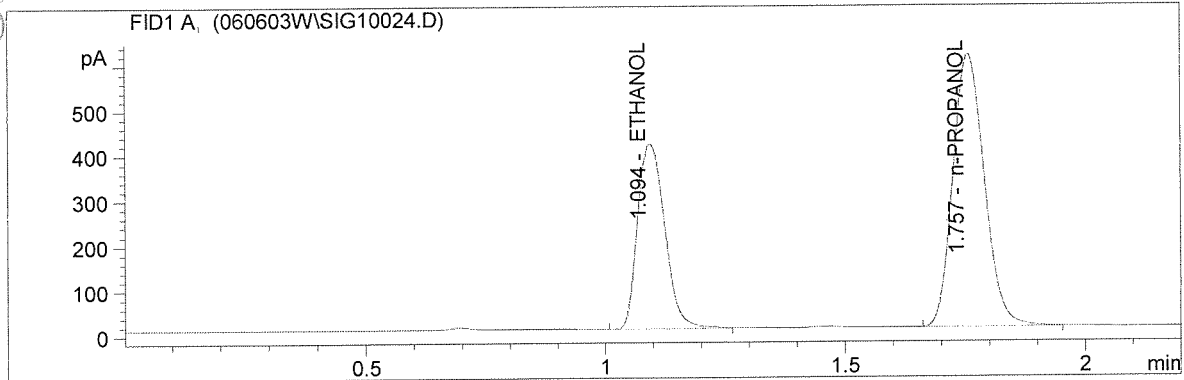


n-PROPANOL 1.000 g/100mL

\HPCHEM\1\METHODS\BLDALCO3.M
 6/03 3:54:03 PM
 Instrument 3
 ALC1

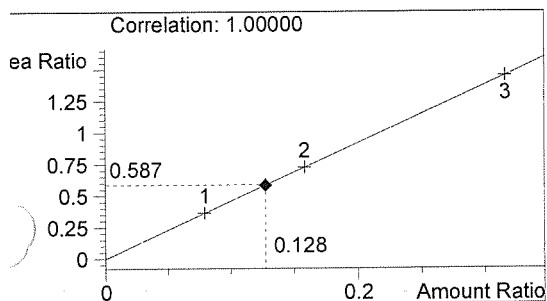
QA 03016 .10
 WP MARSHALL

vial # 24

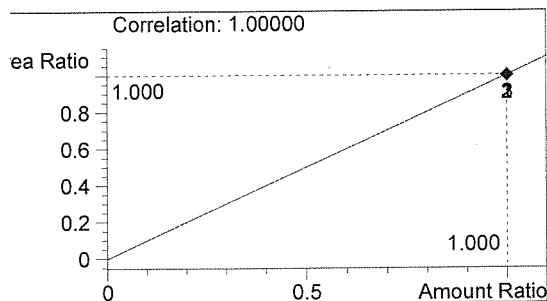


#	Compound	Area	RT
1	ETHANOL	1620	1.094
2	n-PROPANOL	2758	1.757

Totals:



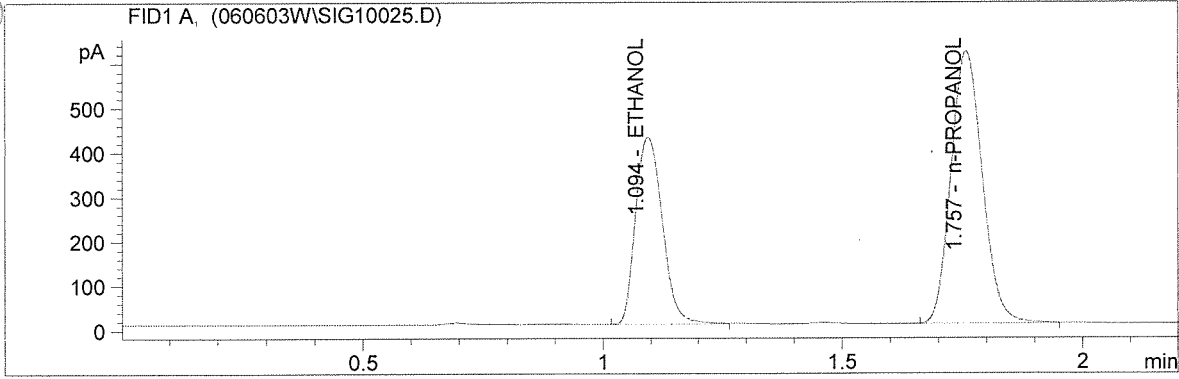
ETHANOL 0.128 g/100mL



n-PROPANOL 1.000 g/100mL

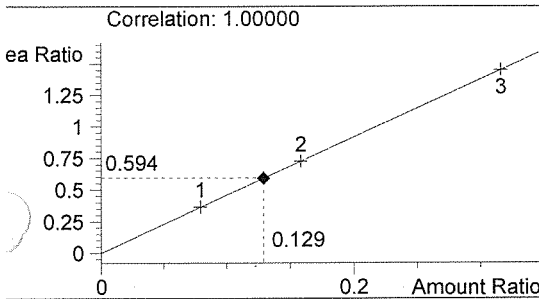
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 ALC1

QA 03016 .10
 WP MARSHALL
 vial # 25

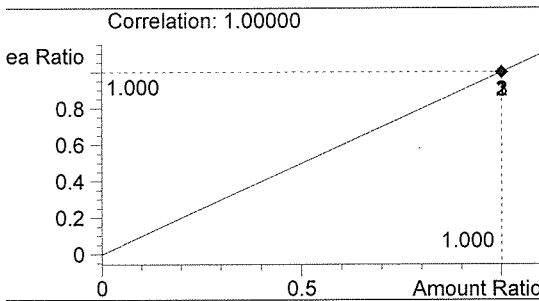


#	Compound	Area	RT
1	ETHANOL	1653	1.094
2	n-PROPANOL	2783	1.757

Totals:



ETHANOL 0.129 g/100mL

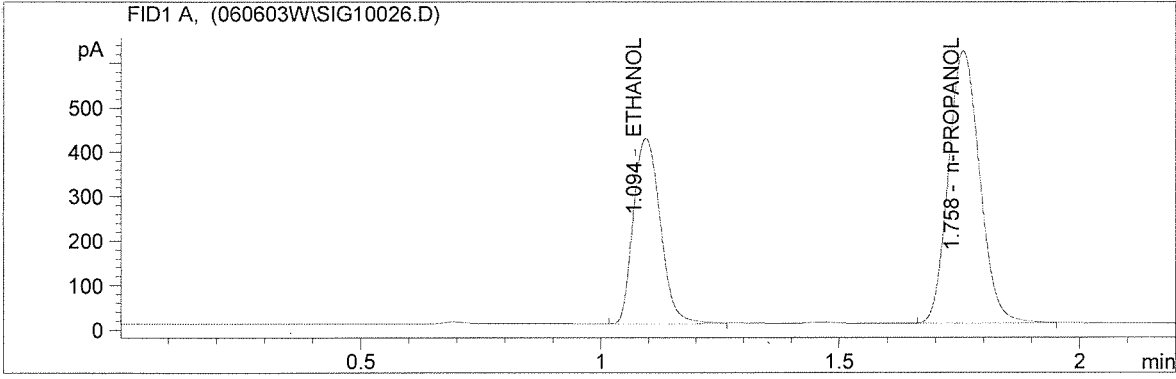


n-PROPANOL 1.000 g/100mL

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 Instrument 3
 L\CALC1

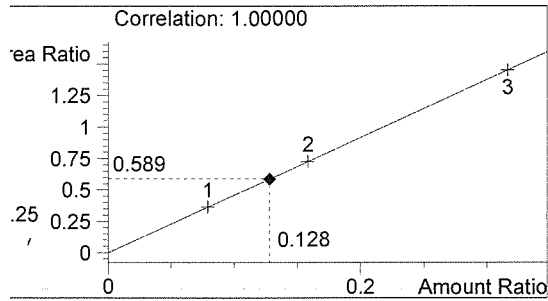
QA 03016 .10
 WP MARSHALL

vial # 26

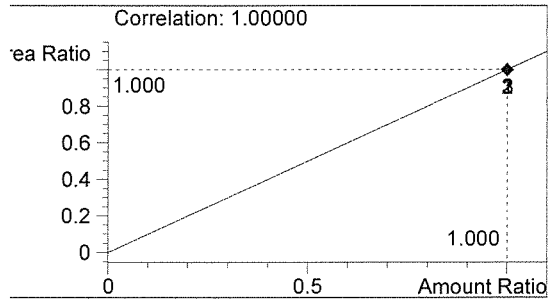


#	Compound	Area	RT
1	ETHANOL	1643	1.094
2	n-PROPANOL	2792	1.758

Totals:



ETHANOL 0.128 g/100mL

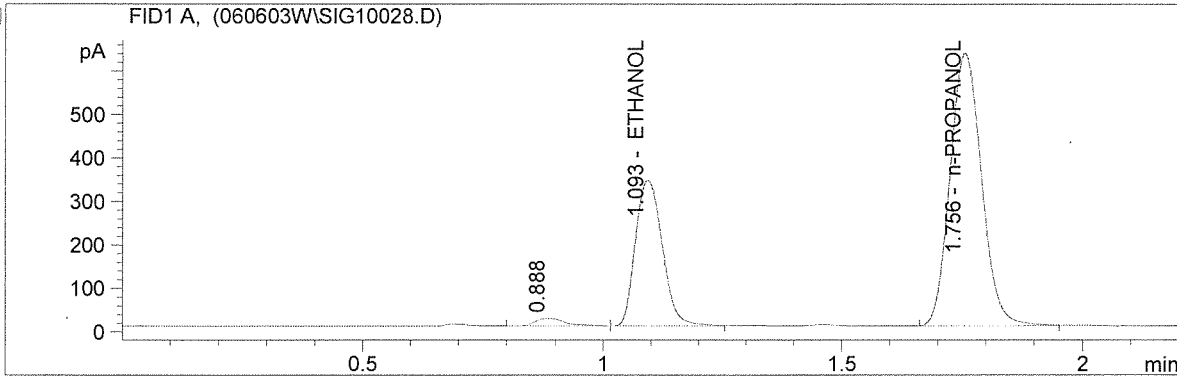


n-PROPANOL 1.000 g/100mL

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 6/03 4:07:33 PM
 Instrument 3
 ALC1

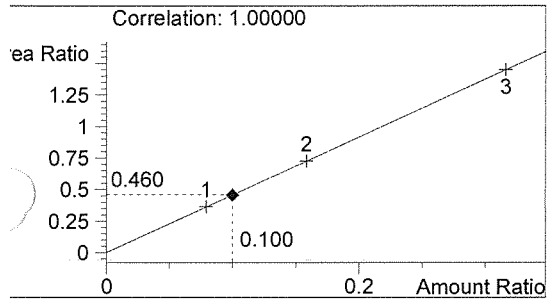
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vial # 28

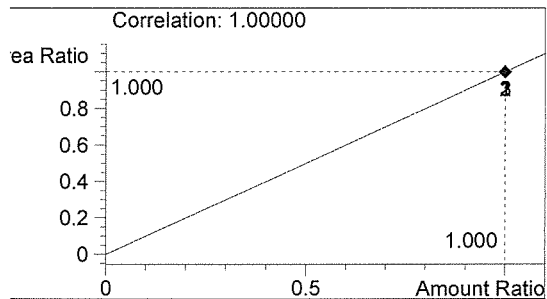


#	Compound	Area	RT
1		74	0.888
2	ETHANOL	1315	1.093
3	n-PROPANOL	2857	1.756

Totals:



ETHANOL 0.100 g/100mL

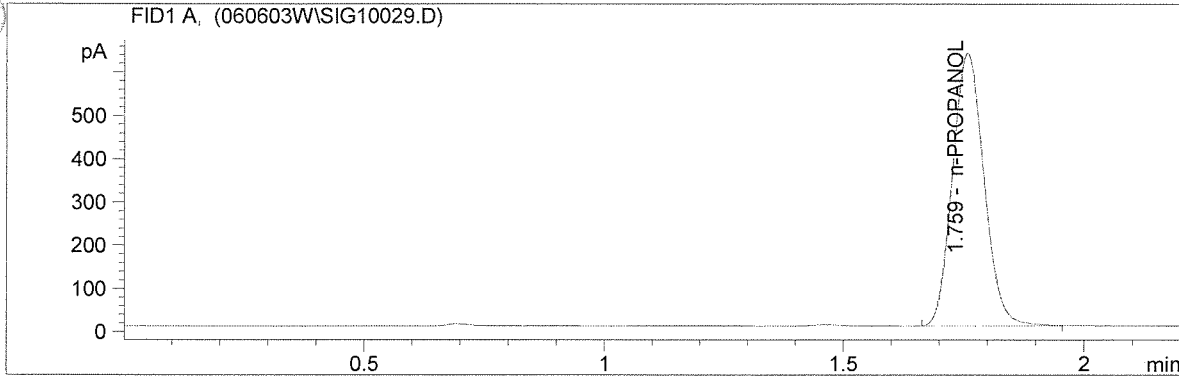


n-PROPANOL 1.000 g/100mL

\\HPCHEM\1\METHODS\BLDALCO3.M
 6/03 4:10:56 PM
 Instrument 3
 ALC1

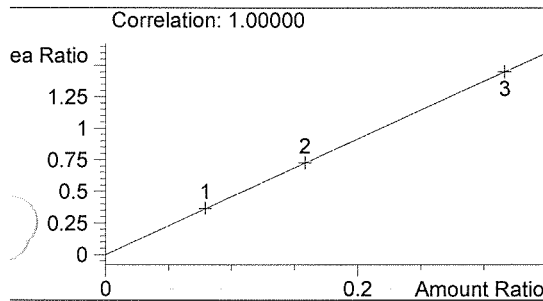
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 WP MARSHALL

vial # 29

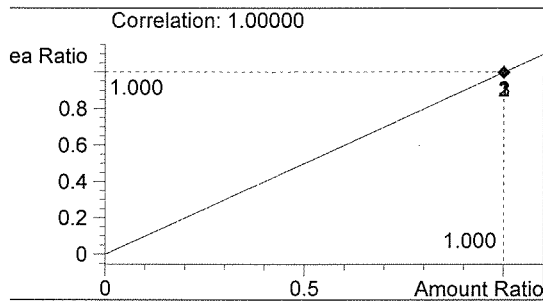


#	Compound	Area	RT
1	ETHANOL	0	0.000
2	n-PROPANOL	2879	1.759

Totals:



ETHANOL 0.000 g/100mL

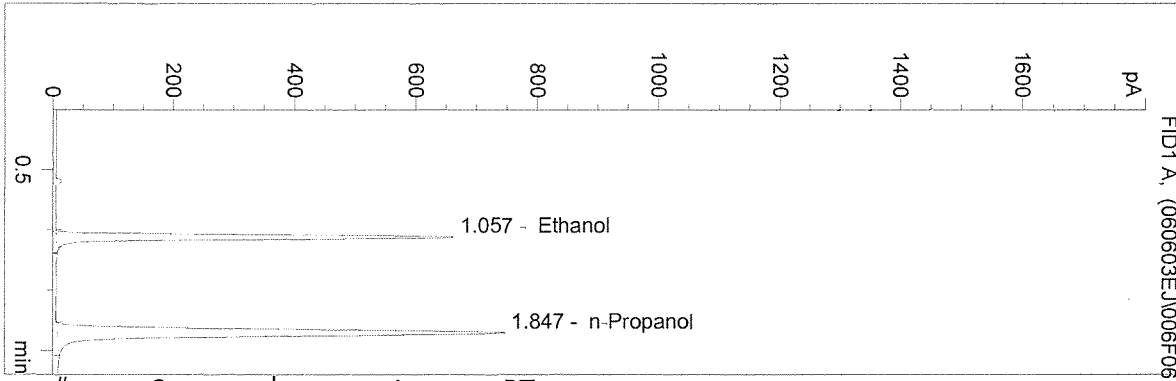


n-PROPANOL 1.000 g/100mL

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 Instrument 2
 ALC1

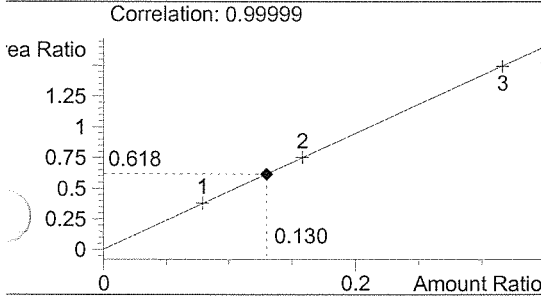
Q.C. 03016
 Estuardo J. Miranda

vial # 6

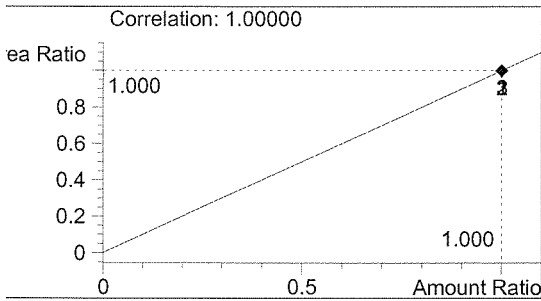


#	Compound	Area	RT
1	Ethanol	1772	1.057
2	n-Propanol	2869	1.847

Totals:



Ethanol 0.130 g/100ml

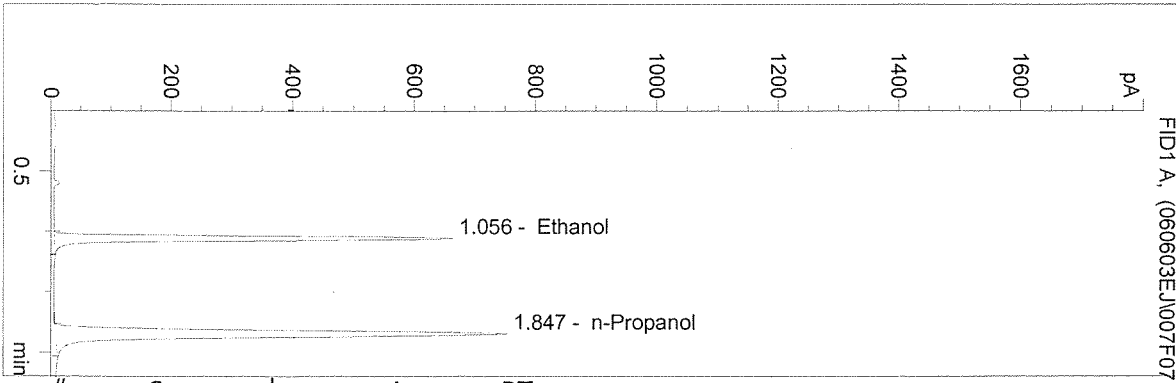


n-Propanol 1.000 g/100ml

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 6/03 2:41:49 PM
 Instrument 2
 ALC1

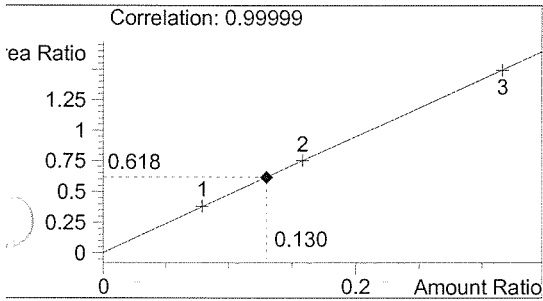
Q.C. 03016
 Estuardo J. Miranda

vial # 7

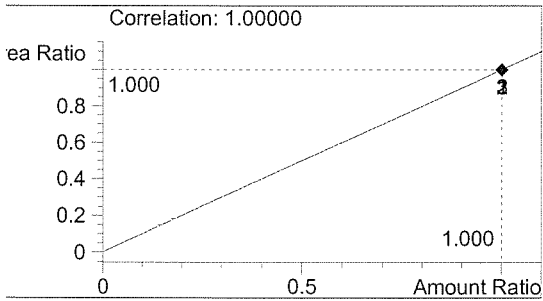


#	Compound	Area	RT
1	Ethanol	1782	1.056
2	n-Propanol	2886	1.847

Totals:



Ethanol 0.130 g/100ml

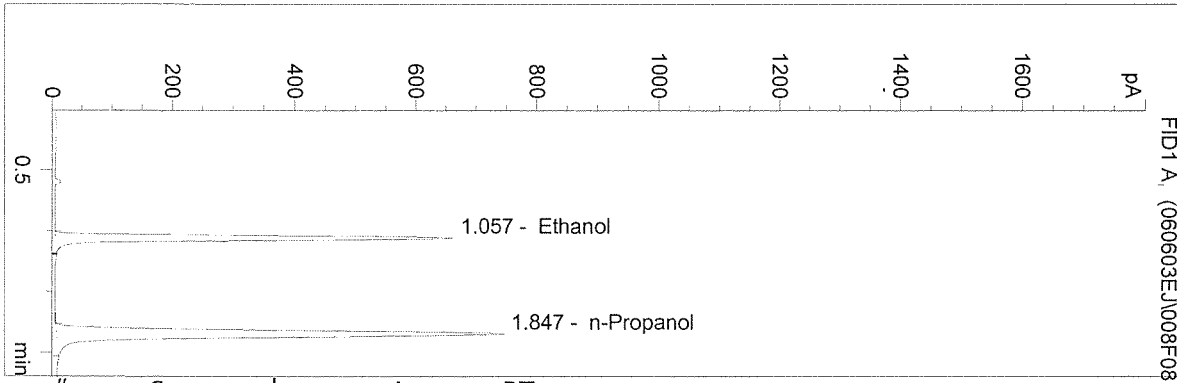


n-Propanol 1.000 g/100ml

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 Instrument 2
 ALC1

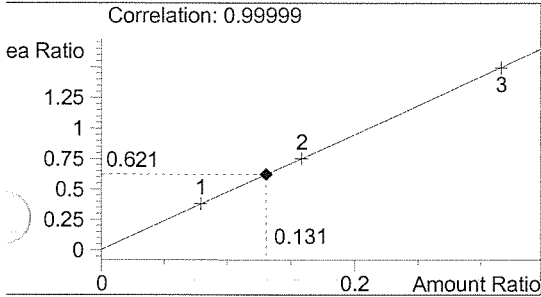
Q.C. 03016
 Estuardo J. Miranda

vial # 8

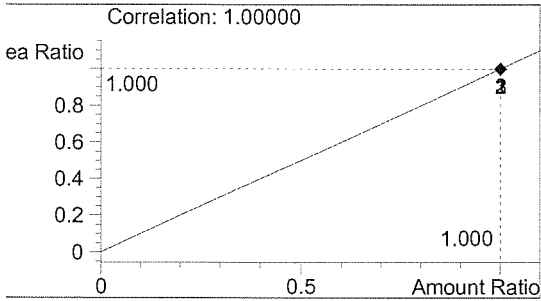


#	Compound	Area	RT
1	Ethanol	1779	1.057
2	n-Propanol	2865	1.847

Totals:



Ethanol 0.131 g/100ml

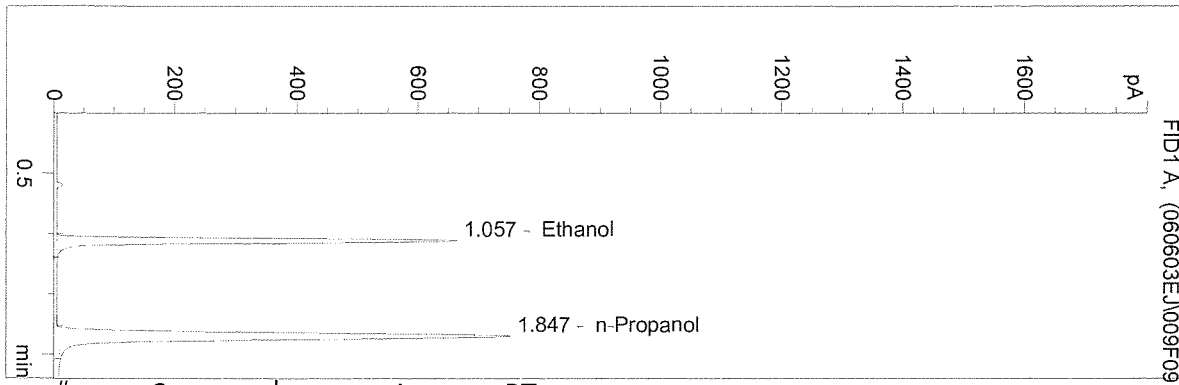


n-Propanol 1.000 g/100ml

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 6/03 2:48:14 PM
 Instrument 2
 ALC1

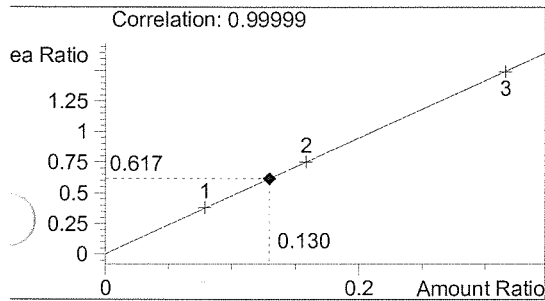
Q.C. 03016
 Estuardo J. Miranda

vial # 9

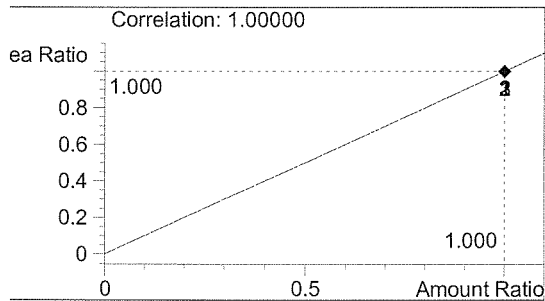


#	Compound	Area	RT
1	Ethanol	1786	1.057
2	n-Propanol	2897	1.847

Totals:



Ethanol 0.130 g/100ml

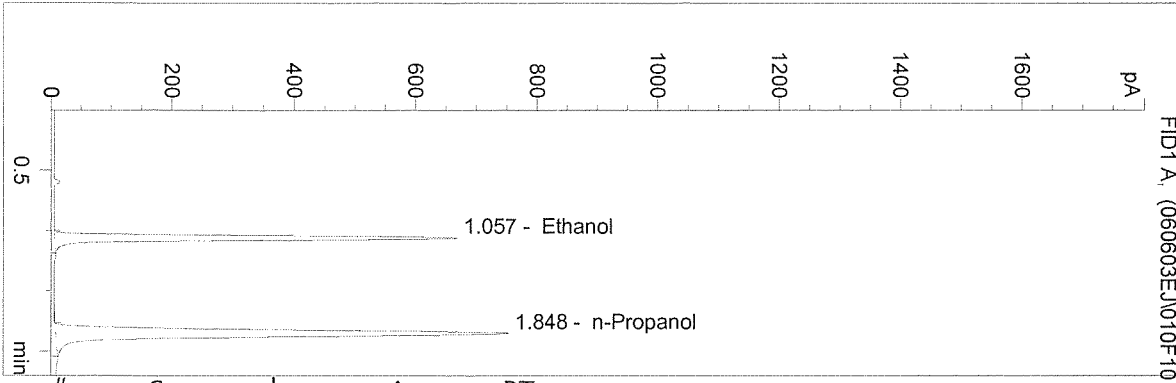


n-Propanol 1.000 g/100ml

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 Instrument 2
 ALC1

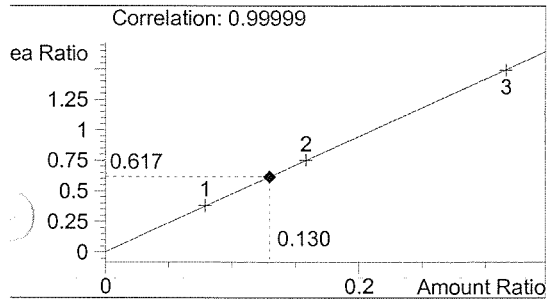
Q.C. 03016
 Estuardo J. Miranda

vial # 10

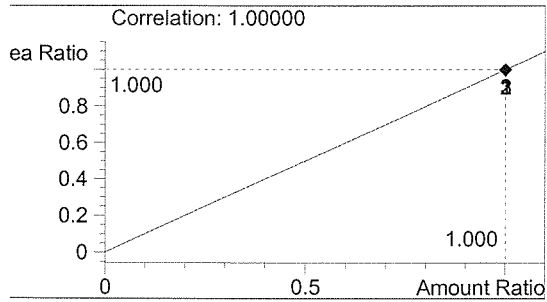


#	Compound	Area	RT
1	Ethanol	1786	1.057
2	n-Propanol	2895	1.848

Totals:



Ethanol 0.130 g/100ml

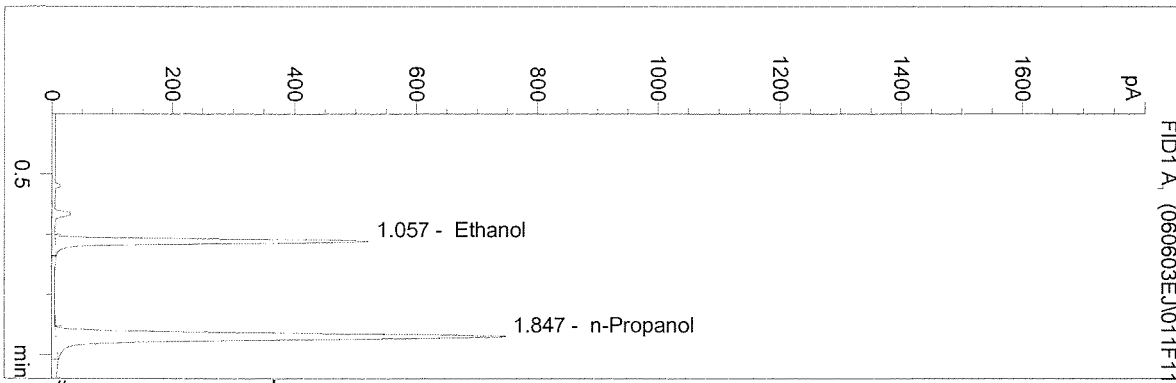


n-Propanol 1.000 g/100ml

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 7/6/03 2:54:19 PM
 Instrument 2
 ALC1

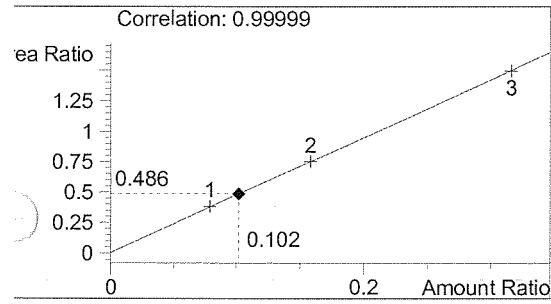
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 Estuardo J. Miranda

vial # 11

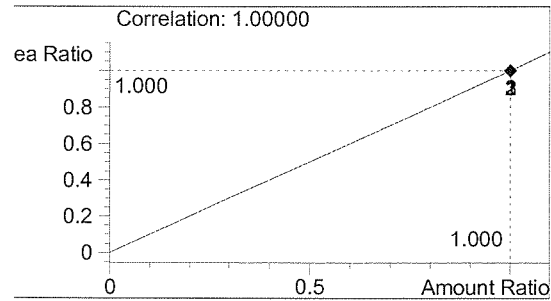


#	Compound	Area	RT
1	Ethanol	1401	1.057
2	n-Propanol	2882	1.847

Totals:



Ethanol 0.102 g/100ml

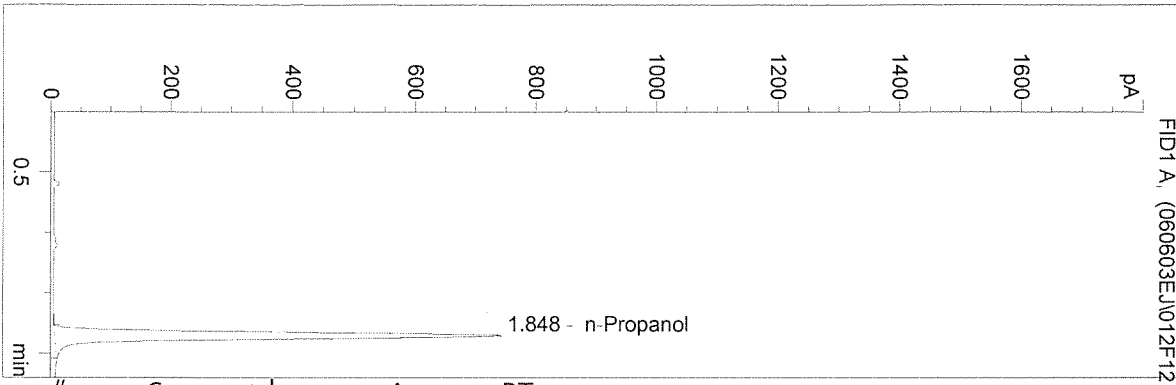


n-Propanol 1.000 g/100ml

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 Instrument 2
 ALC1

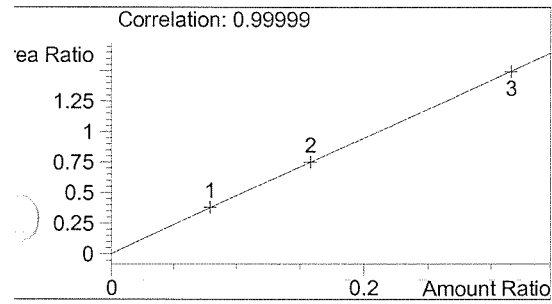
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 Estuardo J. Miranda

vial # 12

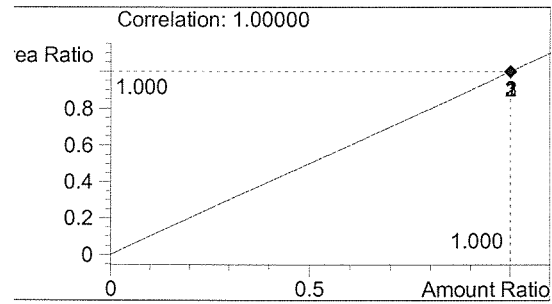


#	Compound	Area	RT
1	Ethanol	0	0.000
2	n-Propanol	2851	1.848

Totals:



Ethanol 0.000 g/100ml



n-Propanol 1.000 g/100ml

STDS 033569

:\HPCHEM\1\METHODS\BLDALCO.M

7/9/03 11:59:45 AM

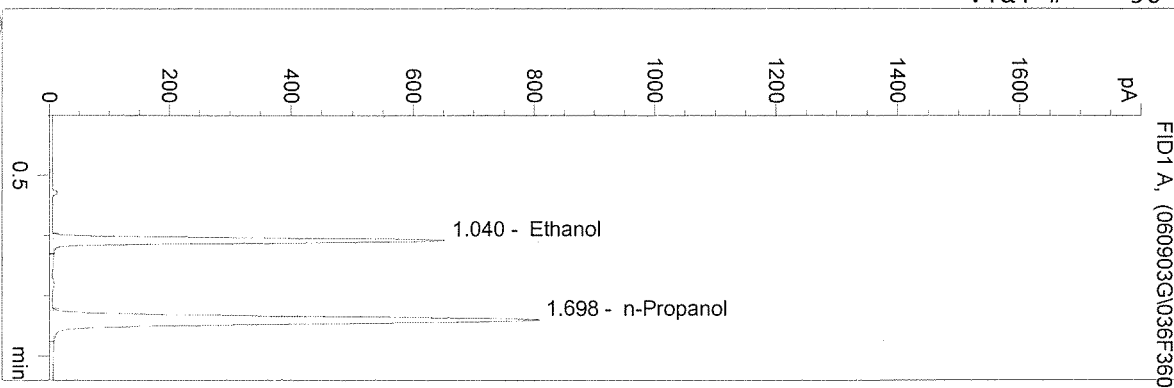
Instrument 1

ALC1

0.10QASOL 03016

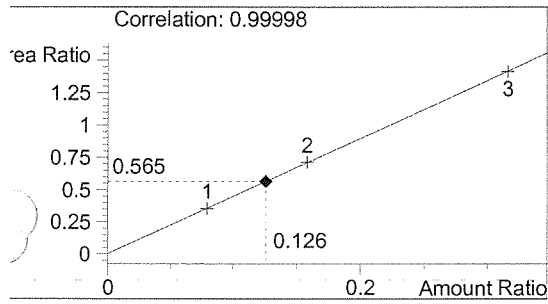
Gene Schwilke

vial # 36

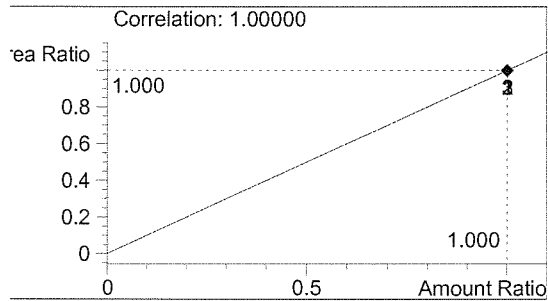


#	Compound	Area	RT
1	Ethanol	1898	1.040
2	n-Propanol	3359	1.698

Totals:



Ethanol 0.126 g/100ml



n-Propanol 1.000 g/100ml

:\HPCHEM\1\METHODS\BLDALCO.M

9/03 12:02:47 PM

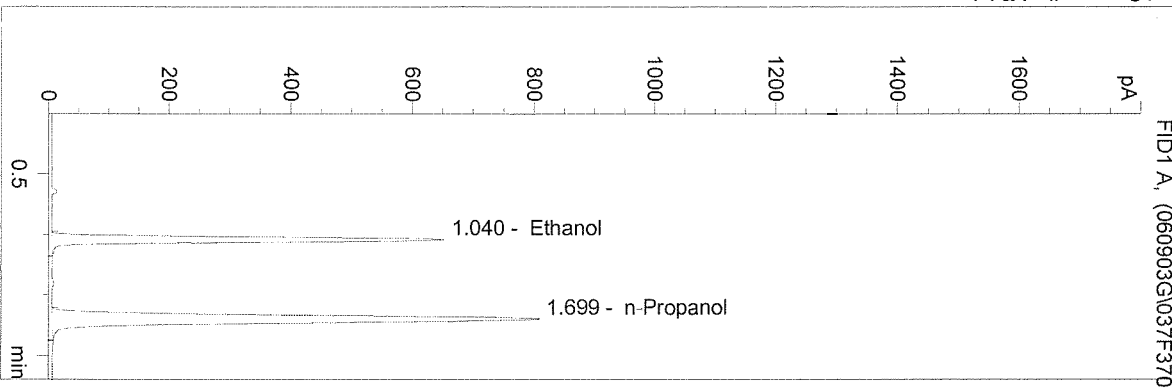
Instrument 1

ALC1

0.10QASOL 03016

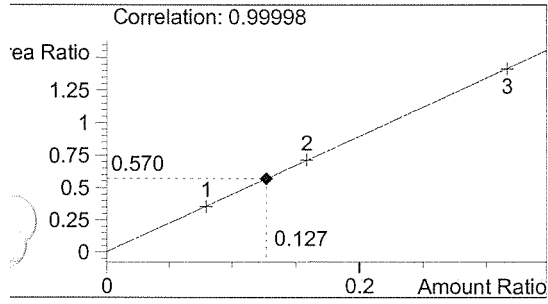
Gene Schwilke

vial # 37

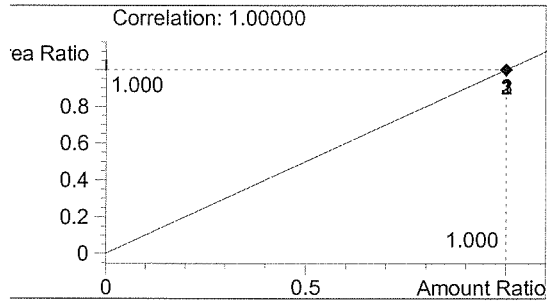


#	Compound	Area	RT
1	Ethanol	1915	1.040
2	n-Propanol	3359	1.699

Totals:



Ethanol 0.127 g/100ml



n-Propanol 1.000 g/100ml

:\HPCHEM\1\METHODS\BLDALCO.M

7/9/03 12:06:11 PM

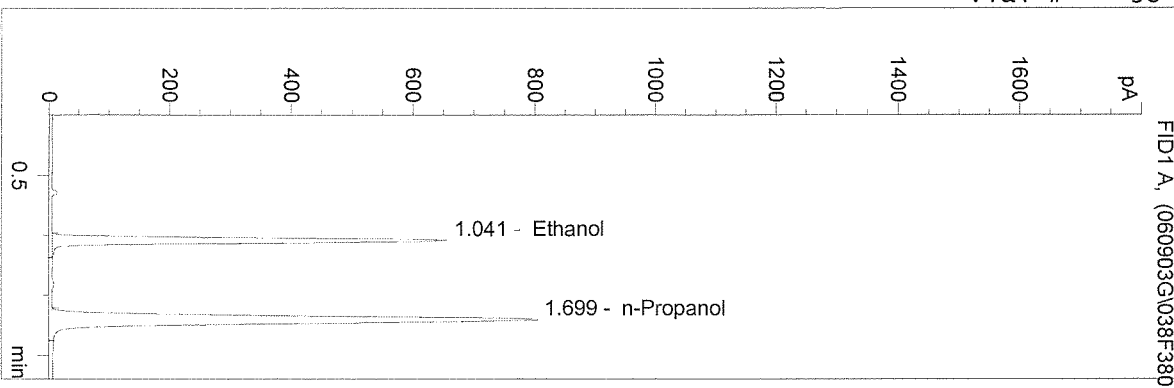
Instrument 1

ALC1

0.10QASOL 03016

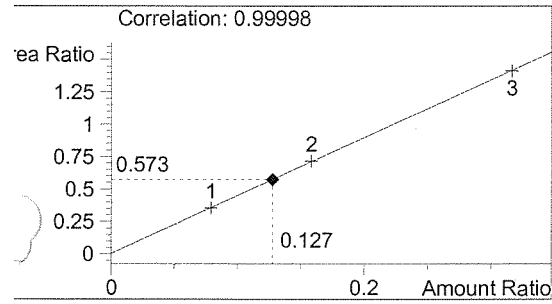
Gene Schwilke

vial # 38

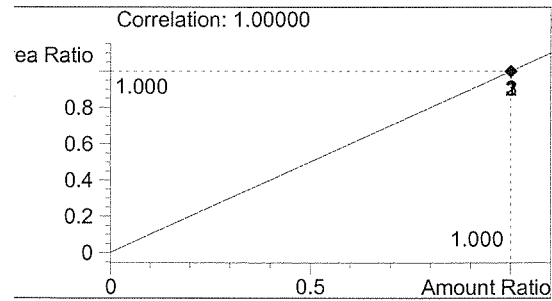


#	Compound	Area	RT
1	Ethanol	1912	1.041
2	n-Propanol	3337	1.699

Totals:



Ethanol 0.127 g/100ml



n-Propanol 1.000 g/100ml

:\HPCHEM\1\METHODS\BLDALCO.M

9/03 12:09:17 PM

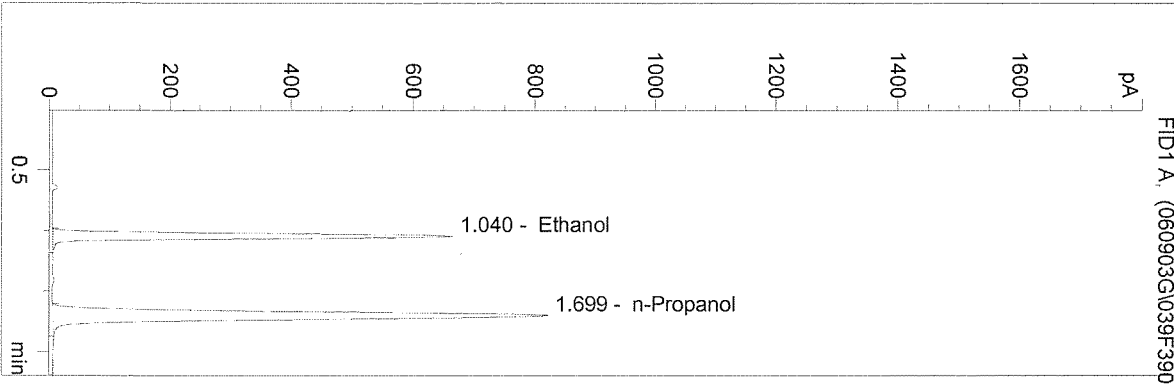
Instrument 1

ALC1

0.10QASOL 03016

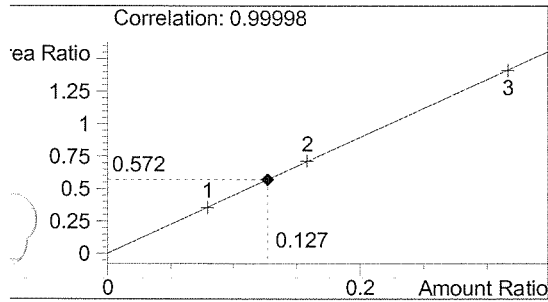
Gene Schwilke

vial # 39

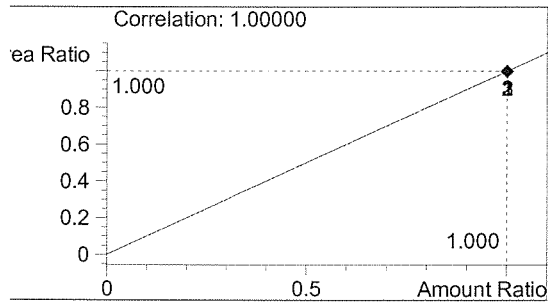


#	Compound	Area	RT
1	Ethanol	1944	1.040
2	n-Propanol	3400	1.699

Totals:



Ethanol 0.127 g/100ml



n-Propanol 1.000 g/100ml

:\HPCHEM\1\METHODS\BLDALCO.M

9/03 12:12:20 PM

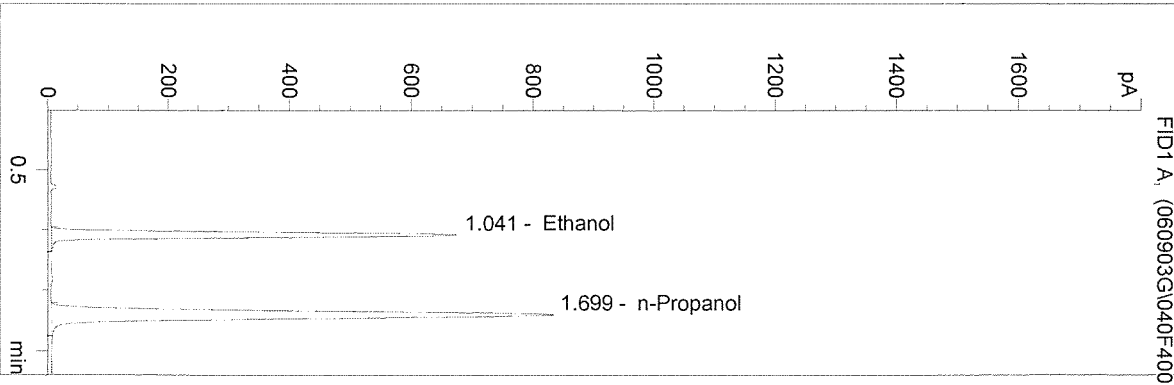
Instrument 1

ALC1

0.10QASOL 03016

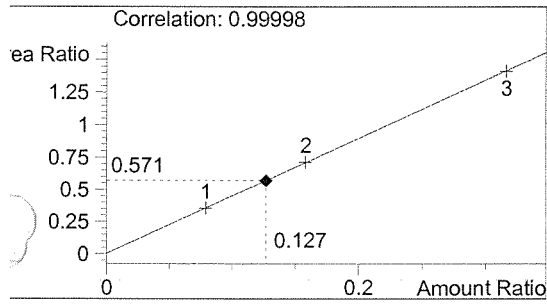
Gene Schwilke

vial # 40

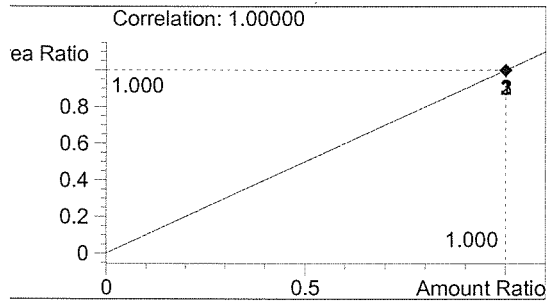


#	Compound	Area	RT
1	Ethanol	1973	1.041
2	n-Propanol	3456	1.699

Totals:



Ethanol 0.127 g/100ml



n-Propanol 1.000 g/100ml

:\HPCHEM\1\METHODS\BLDALCO.M

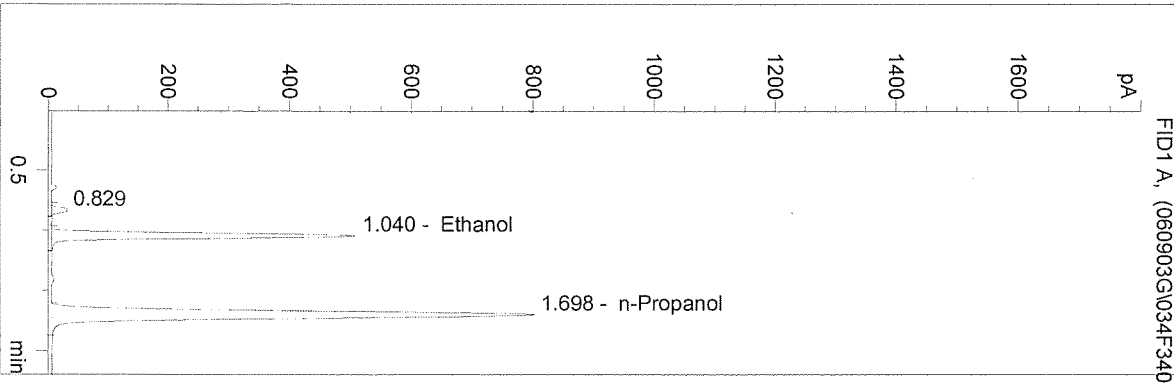
9/03 11:53:42 AM

Instrument 1

ALC1

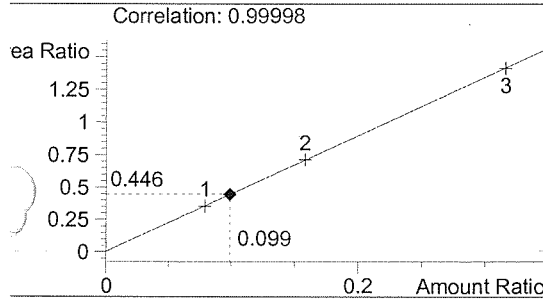
CAP 0.100
Gene Schwilke

vial # 34

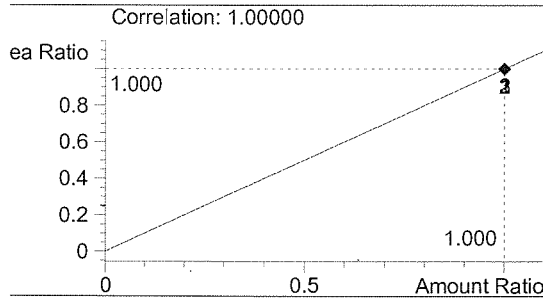


#	Compound	Area	RT
1		79	0.829
2	Ethanol	1485	1.040
3	n-Propanol	3328	1.698

Totals:



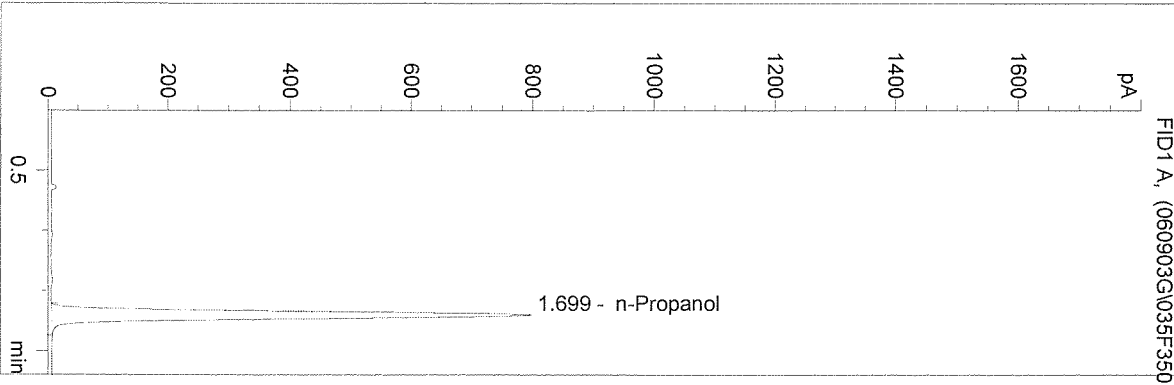
Ethanol 0.099 g/100ml



n-Propanol 1.000 g/100ml

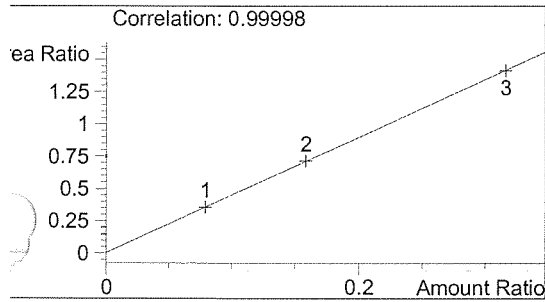
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 7/9/03 11:56:44 AM
 Instrument 1
 ALC1

BLANK
 Gene Schwilke
 vial # 35

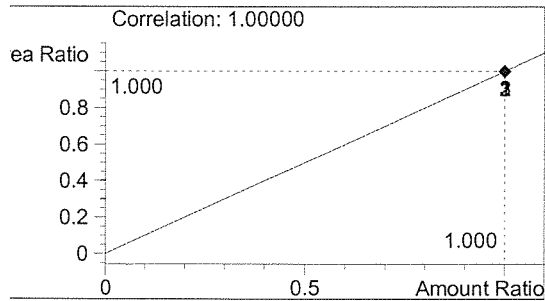


#	Compound	Area	RT
1	Ethanol	0	0.000
2	n-Propanol	3299	1.699

Totals:



Ethanol 0.000 g/100ml



n-Propanol 1.000 g/100ml