

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

Batch number **03011**

Date: 4/21/2003

Preparation: 22.2 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	0.098	0.099	0.097	0.098								
2	0.099	0.099	0.097	0.097								
3	0.099	0.099	0.097	0.098								
4	0.099	0.099	0.098	0.098								
5	0.098	0.099	0.098	0.097								
Ctrl	0.100	0.101	0.098	0.100								

**External Control:**

Lot #: A022167 Exp date: 01/05

Target concentration: 0.10 g/100mL

**Statistics:**

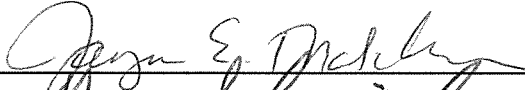
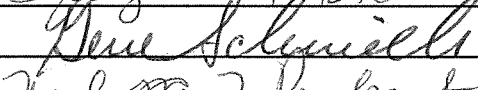
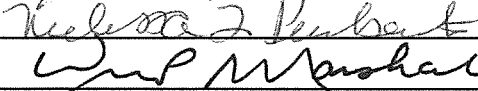
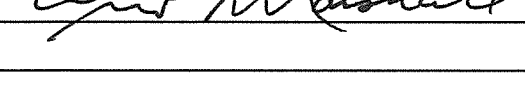
Avg. solution concent.: 0.0982 g/100 mL

SD: 0.00083

Range (3xSD): 0.0956 to 0.1007

Precision CV (%): 0.8499 %

**Equivalent vapor concent.:** 0.0798 g/210L

Analyst	Name	Signature	Date
1	Jayne E. Thatcher		04/21/03
2	Eugene Schwilke		04/22/03
3	Melissa Pemberton		04/25/03
4	William P Marshall		04/24/03
5			
6			
7			
8			
9			
10			
11			
12			

Prepared by: Jayne E. Thatcher

according to the approved protocol



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BAC VERIFIER DATAMASTER QUALITY ASSURANCE SOLUTION  
CERTIFICATION

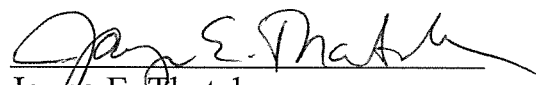
I, Jayne E. Thatcher, do certify under penalty of perjury as follows:

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 quality assurance solution, Lot Number 03011, was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.0982 grams per 100ml.

Dated: 4/29/03  
Seattle, WA

  
Jayne E. Thatcher  
Forensic Toxicologist

JET/bf  
JTQA





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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 six years of experience in the Washington State Toxicology Laboratory.

The quality assurance solution, Lot Number 03011 was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.0982 grams per 100ml.

Dated: 4/29/03  
Seattle, WA

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

GS/bf  
GSQA





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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 03011 was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.0982 grams per 100ml.

Dated: 4/29/03  
Seattle, WA

  
\_\_\_\_\_  
Melissa L. Pemberton  
Forensic Toxicologist

MP/bf  
MPQA





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BAC VERIFIER DATAMASTER QUALITY ASSURANCE SOLUTION  
CERTIFICATION

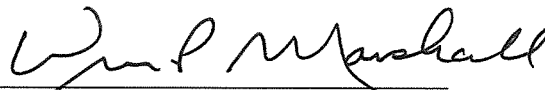
I, William P. Marshall, do certify under penalty of perjury that:

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

The quality assurance solution, Lot Number 03011 was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.0982 grams per 100ml.

Dated: 4/29/03  
Seattle, WA

  
\_\_\_\_\_  
William P. Marshall  
Forensic Toxicologist

WM/bf  
WMQA

Sequence: C:\HPCHEM\2\SEQUENCE\JAYNESAM.S

Sequence Parameters:

Operator: Jayne E. Thatcher  
Data File Naming: Auto  
Data Directory: C:\HPCHEM\2\DATA\  
Data subdirectory: 042103J  
Part of Methods to run: According to Runtime Checklist  
Barcode Reader: not used  
Shutdown Cmd/Macro: none  
Sequence Comment:

STANDARDS  
IN 032459

Sequence Table (Front Injector):

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	03011 QA soln	BLDALCO2	1	Sample		
2	2	03011 QA soln	BLDALCO2	1	Sample		
3	3	03011 QA soln	BLDALCO2	1	Sample		
4	4	03011 QA soln	BLDALCO2	1	Sample		
5	5	03011 QA soln	BLDALCO2	1	Sample		
6	6	0.10 control	BLDALCO2	1	Ctrl Samp		
7	7	blank	BLDALCO2	1	Sample		

Sequence Table (Back Injector):

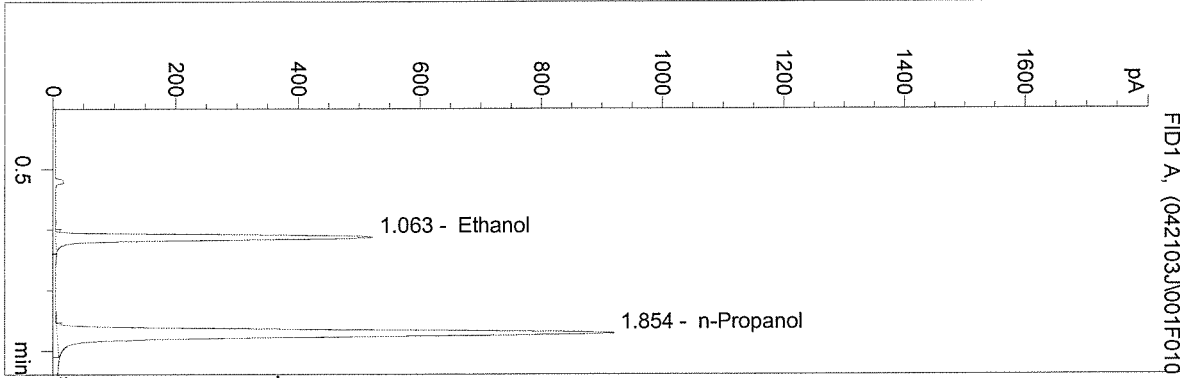
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 4/21/03 4:07:38 PM  
 Instrument 2  
 F:\LC1

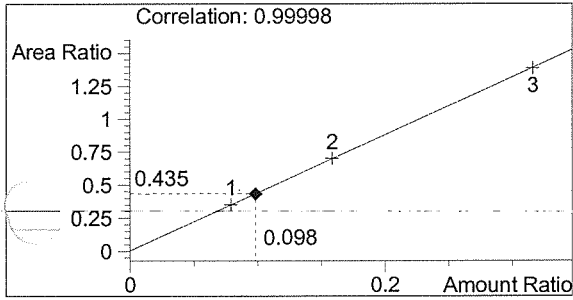
03011 QA soln  
 Jayne E. Thatcher

vial # 1

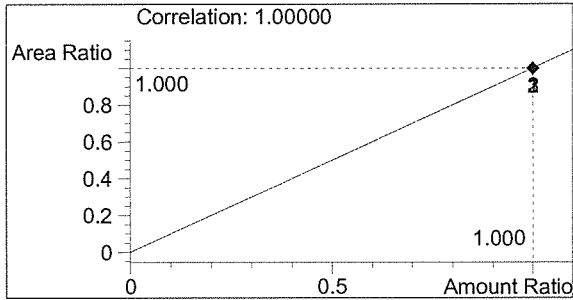


#	Compound	Area	RT
1	Ethanol	1595	1.063
2	n-Propanol	3671	1.854

Totals:



Ethanol 0.098 g/100ml



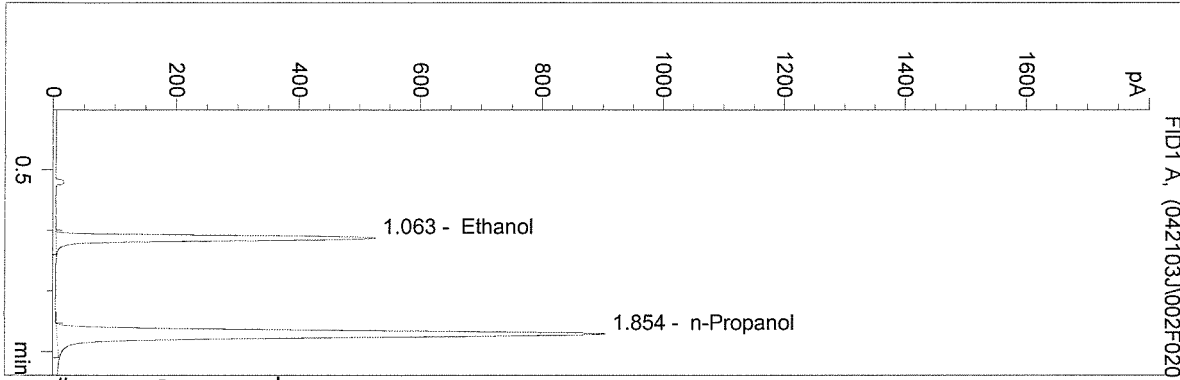
n-Propanol 1.000 g/100ml

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 Instrument 2  
 FID1

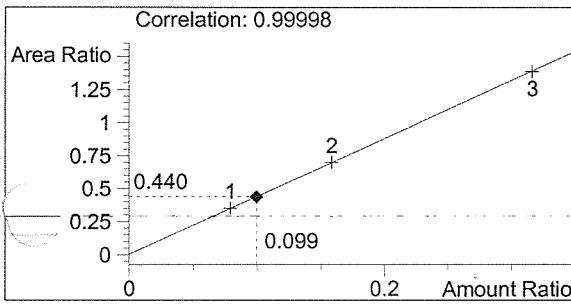
03011 QA soln  
 Jayne E. Thatcher

vial # 2

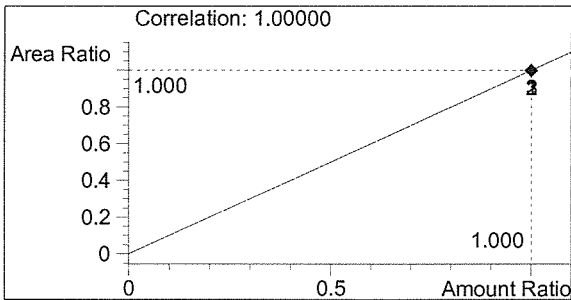


#	Compound	Area	RT
1	Ethanol	1589	1.063
2	n-Propanol	3611	1.854

Totals:



Ethanol 0.099 g/100ml



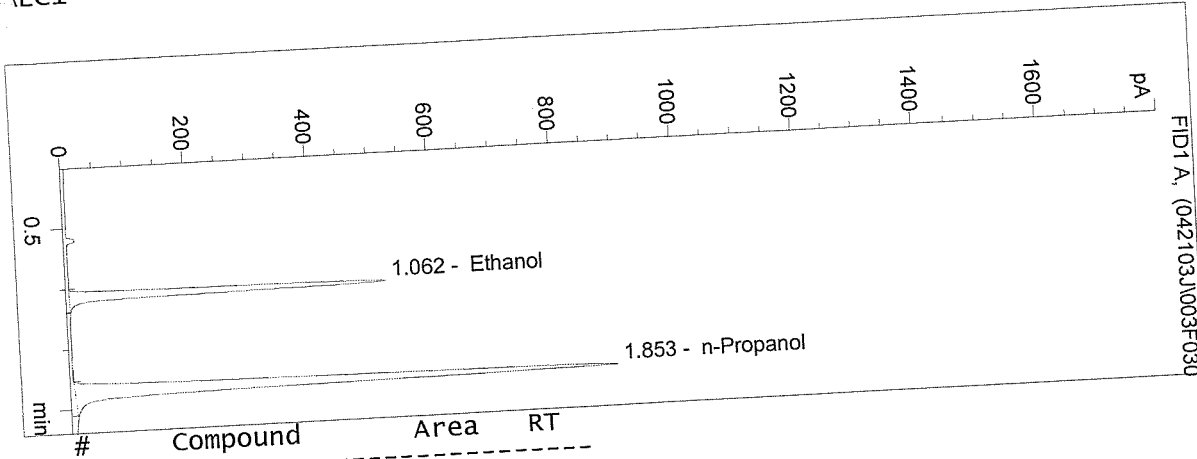
n-Propanol 1.000 g/100ml



03011 QA soln  
Jayne E. Thatcher

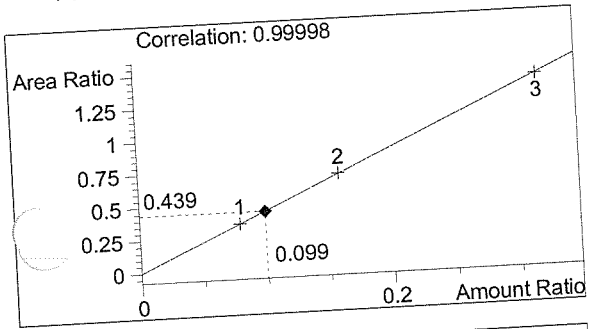
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Instrument 2  
LC1

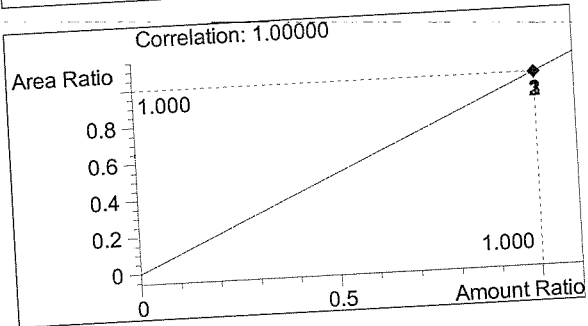


#	Compound	Area	RT
1	Ethanol	1570	1.062
2	n-Propanol	3576	1.853

Totals:



Ethanol 0.099 g/100ml



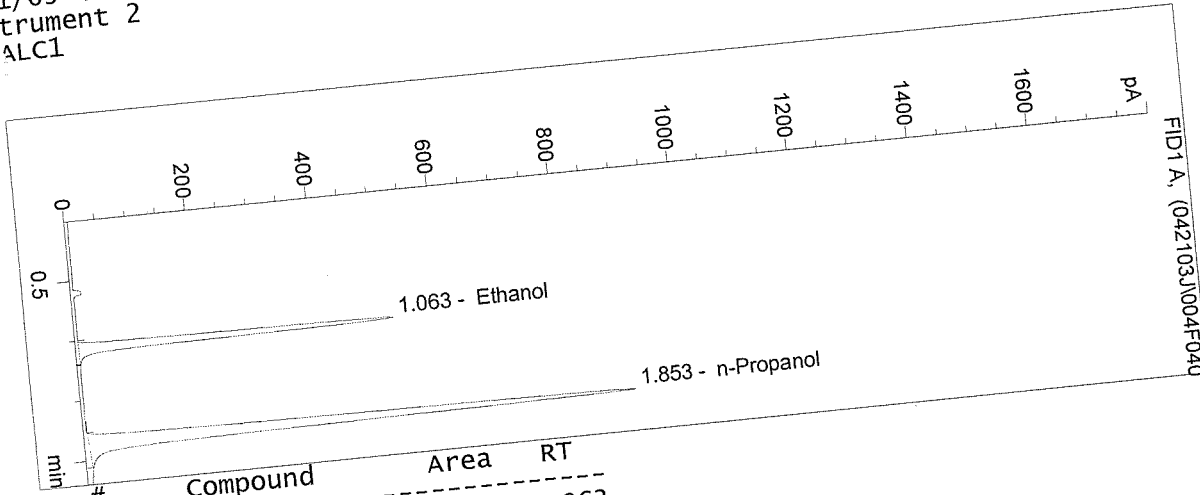
n-Propanol 1.000 g/100ml

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03011 QA soln  
Jayne E. Thatcher

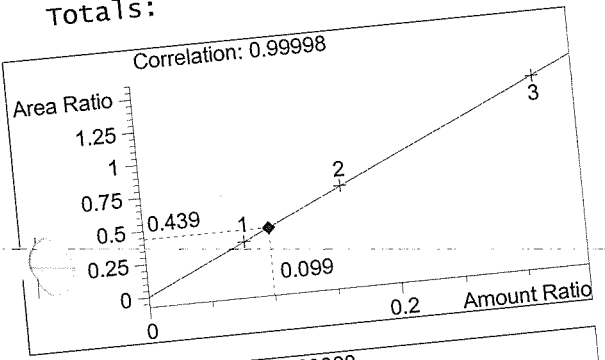
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Instrument 2  
CALC1

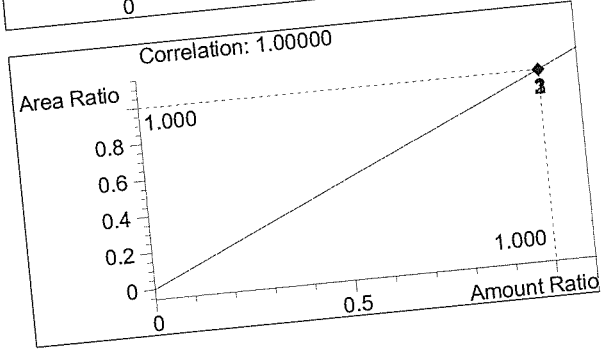


#	Compound	Area	RT
1	Ethanol	1602	1.063
2	n-Propanol	3649	1.853

Totals:



Ethanol 0.099 g/100ml



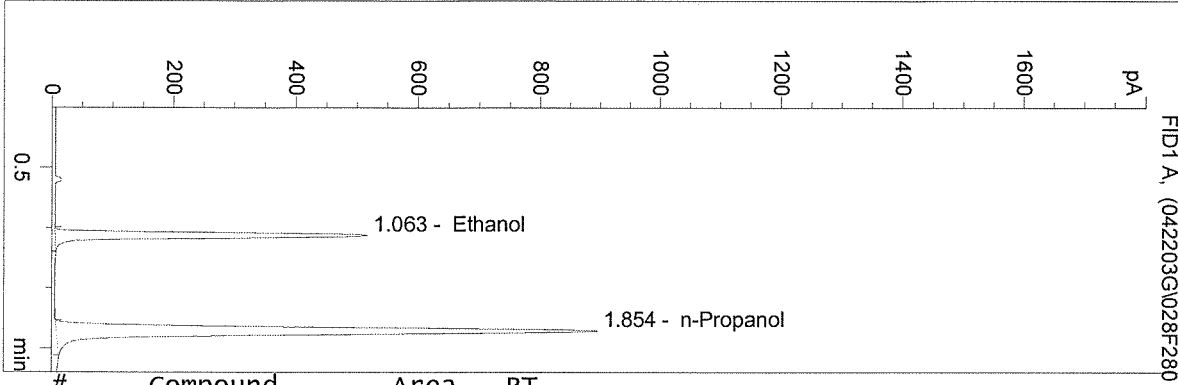
n-Propanol 1.000 g/100ml

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 4/22/03 1:43:37 PM  
 Instrument 2  
 ALC1

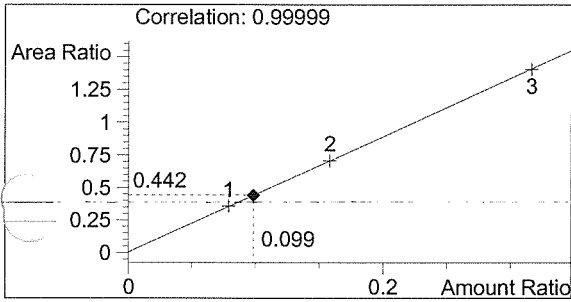
0.08 QASOL 03011  
 Gene Schwilke  
 vial # 28

STDS  
 032485

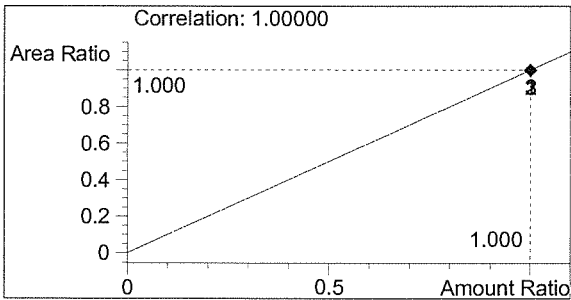


#	Compound	Area	RT
1	Ethanol	1588	1.063
2	n-Propanol	3597	1.854

Totals:



Ethanol 0.099 g/100ml

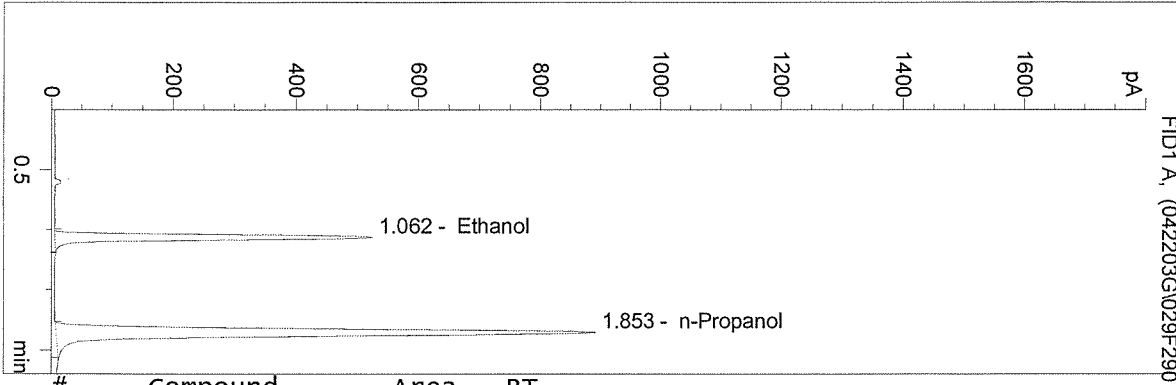


n-Propanol 1.000 g/100ml

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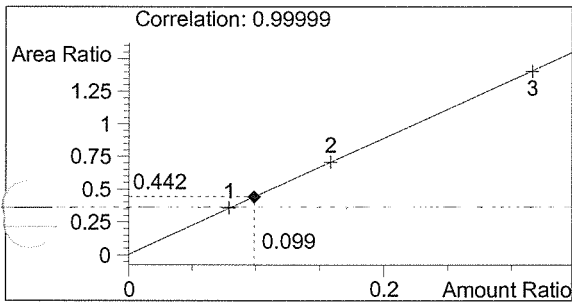
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 Instrument 2  
 ALC1

0.08 QASOL 03011  
 Gene Schwilke  
 vial # 29

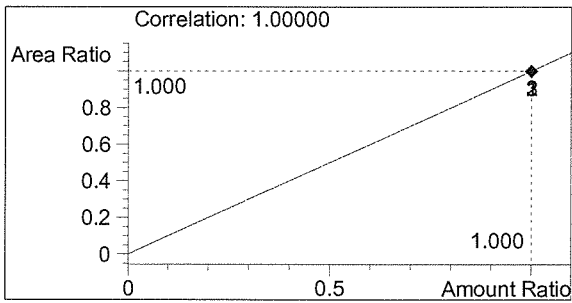


#	Compound	Area	RT
1	Ethanol	1581	1.062
2	n-Propanol	3573	1.853

Totals:



Ethanol 0.099 g/100ml

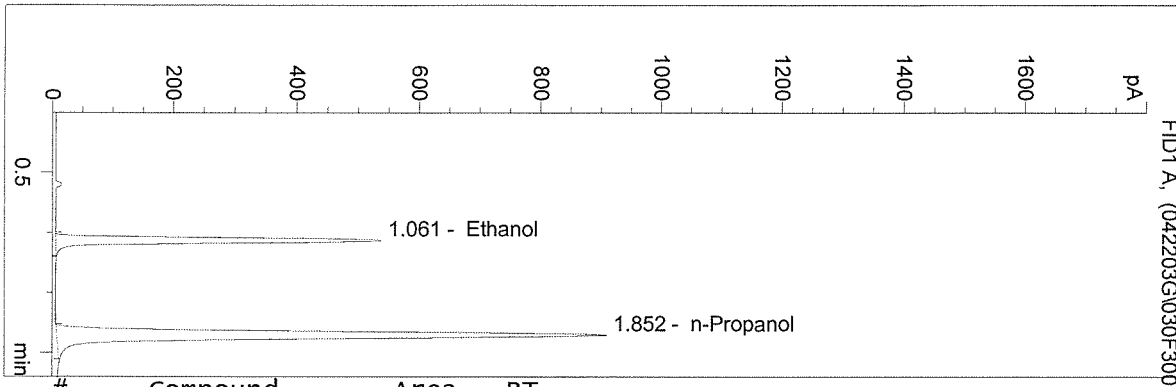


n-Propanol 1.000 g/100ml

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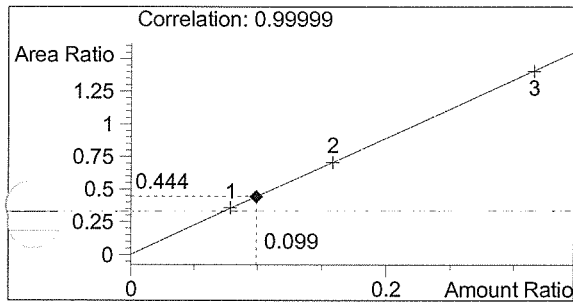
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 Instrument 2  
 ALC1

0.08 QASOL 03011  
 Gene Schwilke  
 vial # 30

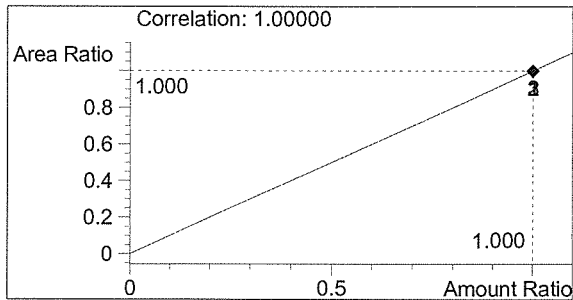


#	Compound	Area	RT
1	Ethanol	1609	1.061
2	n-Propanol	3623	1.852

Totals:



Ethanol 0.099 g/100ml

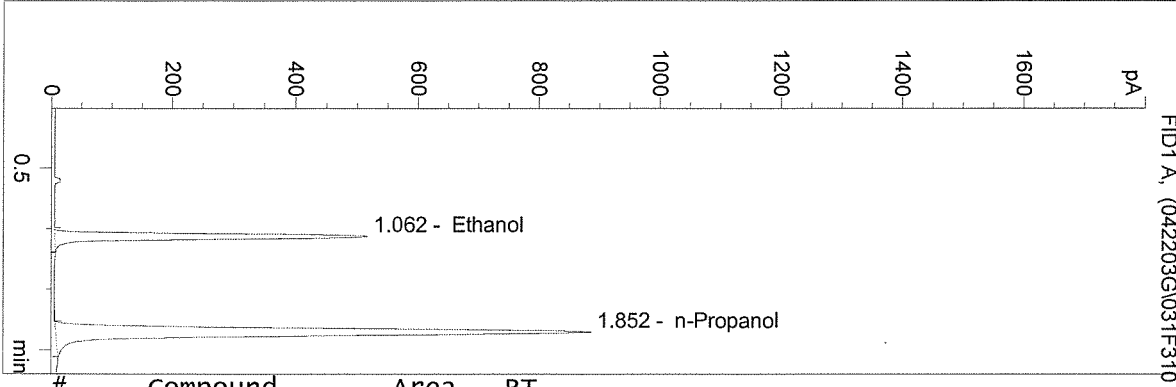


n-Propanol 1.000 g/100ml

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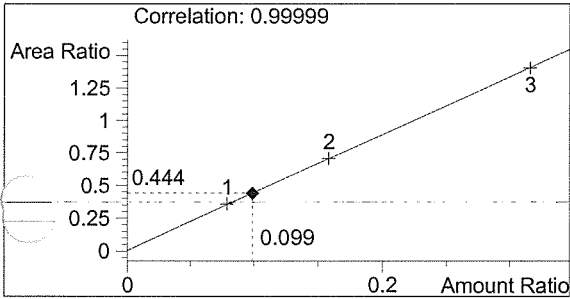
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 Instrument 2  
 ALC1

0.08 QASOL 03011  
 Gene Schwilke  
 vial # 31

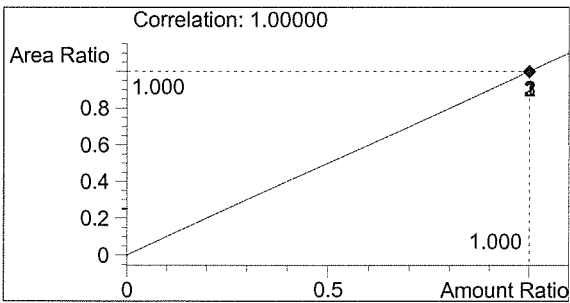


#	Compound	Area	RT
1	Ethanol	1579	1.062
2	n-Propanol	3557	1.852

Totals:



Ethanol 0.099 g/100ml



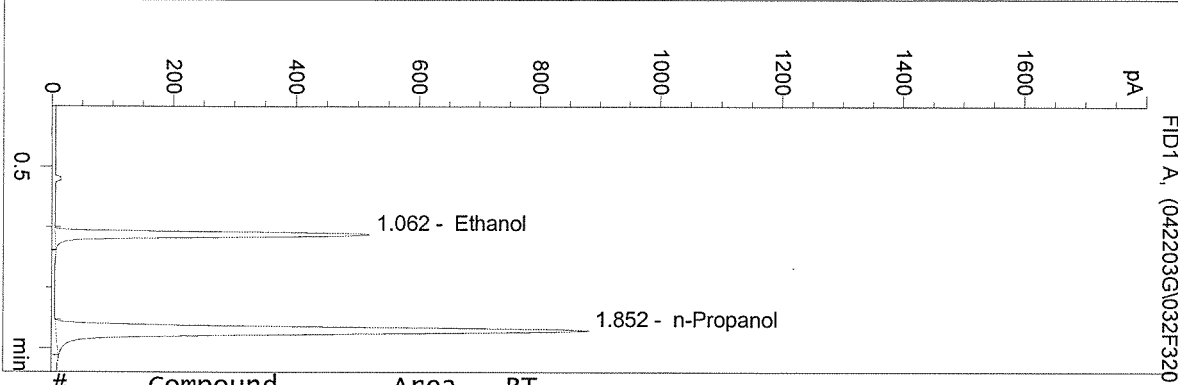
n-Propanol 1.000 g/100ml

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 ALC1

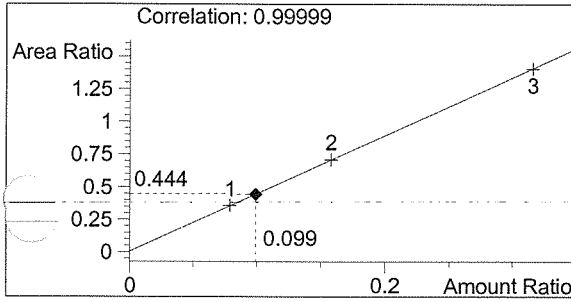
0.08 QASOL 03011  
 Gene Schwilke

vial # 32

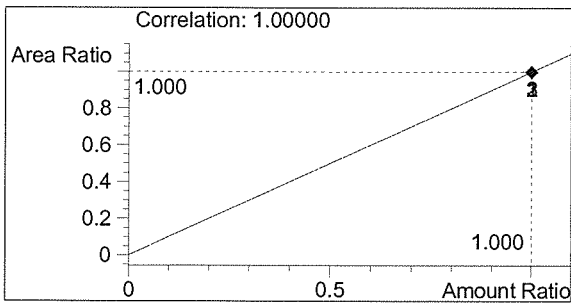


#	Compound	Area	RT
1	Ethanol	1575	1.062
2	n-Propanol	3543	1.852

Totals:



Ethanol 0.099 g/100ml

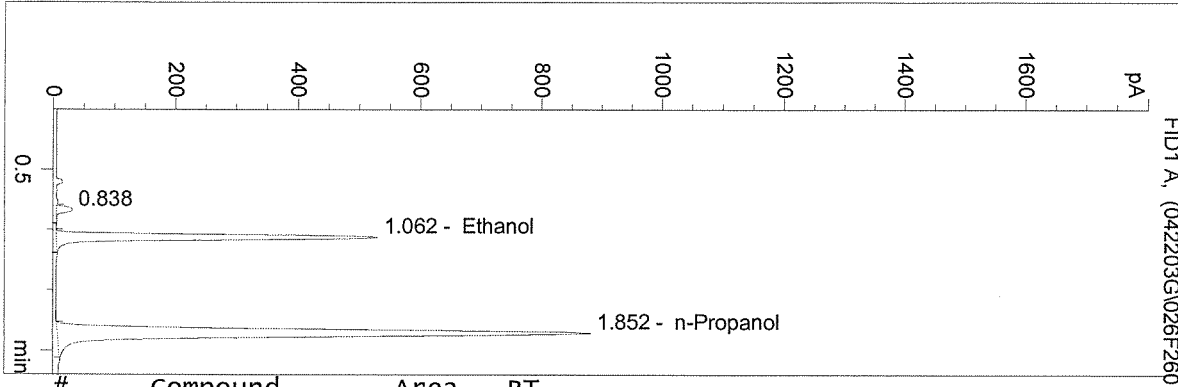


n-Propanol 1.000 g/100ml

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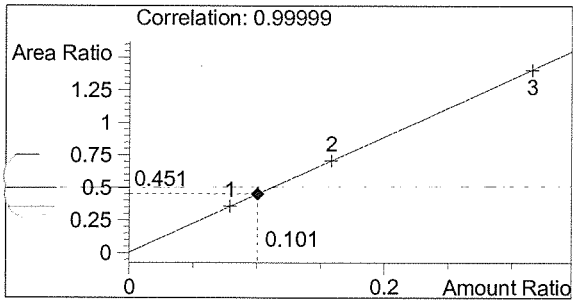
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 Instrument 2  
 ALC1

CAP 0.100  
 Gene Schwilke  
 vial # 26

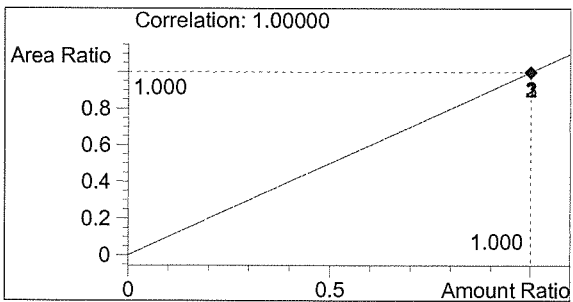


#	Compound	Area	RT
1		85	0.838
2	Ethanol	1597	1.062
3	n-Propanol	3538	1.852

Totals:



Ethanol 0.101 g/100ml



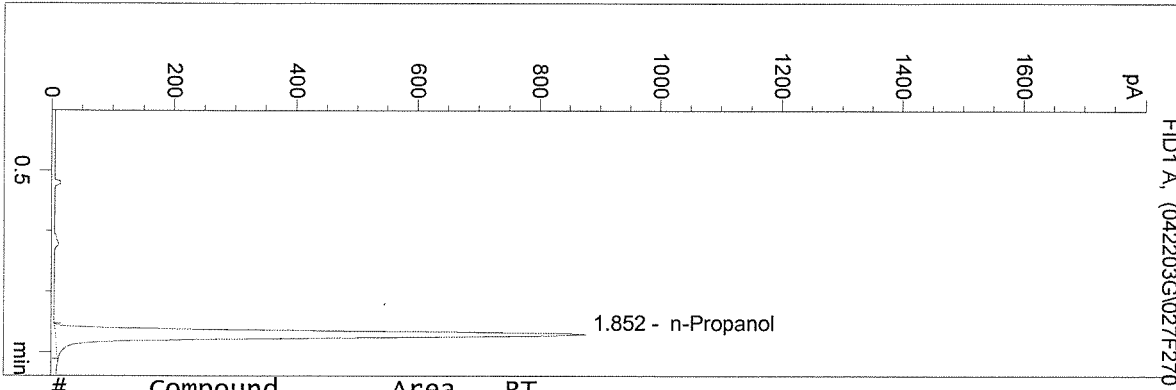
n-Propanol 1.000 g/100ml



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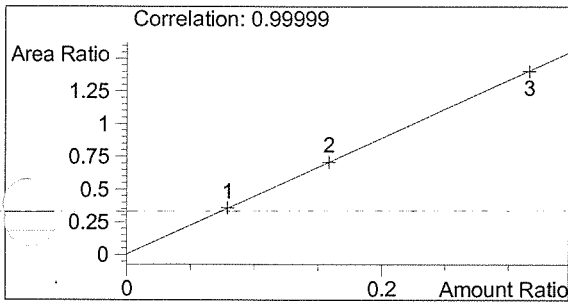
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 Instrument 2  
 ALC1

BLANK  
 Gene Schwilke  
 vial # 27

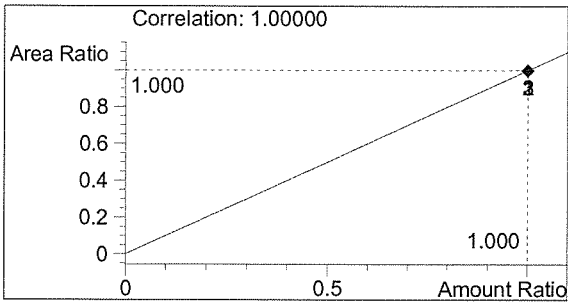


#	Compound	Area	RT
1	Ethanol	0	0.000
2	n-Propanol	3514	1.852

Totals:



Ethanol 0.000 g/100ml



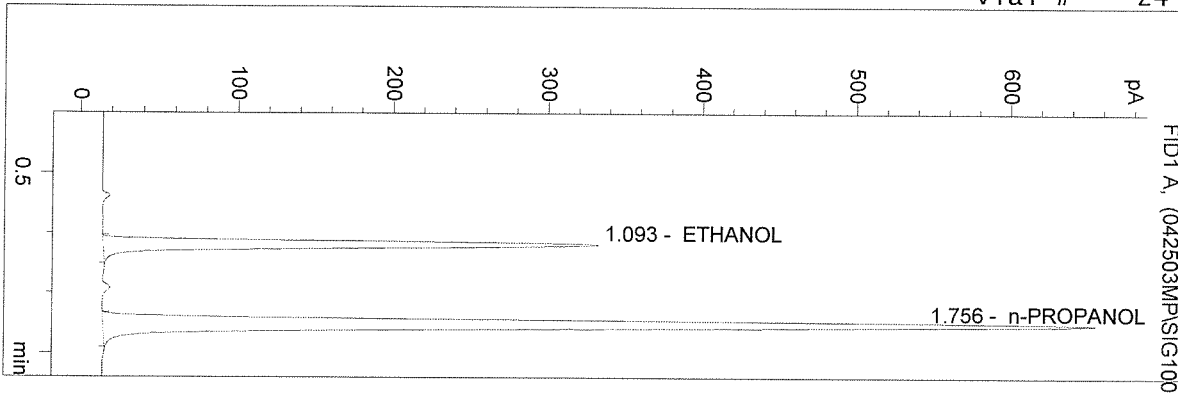
n-Propanol 1.000 g/100ml

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 Instrument 3  
 ALC1

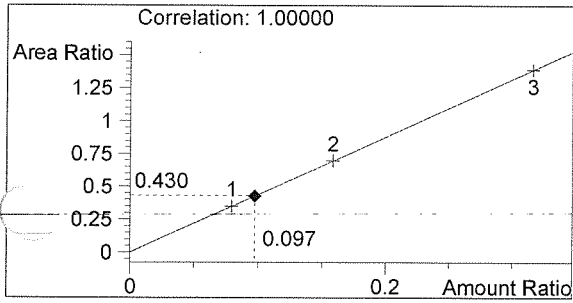
03011 0.08QA  
 M PEMBERTON

vial # 24

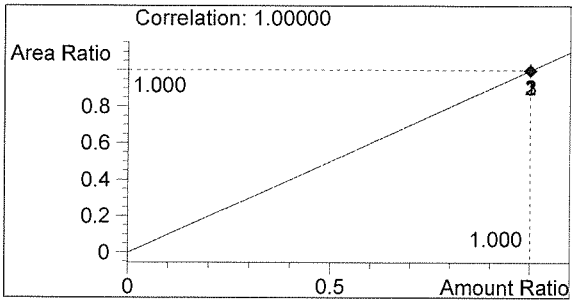


#	Compound	Area	RT
1	ETHANOL	1251	1.093
2	n-PROPANOL	2912	1.756

Totals:



ETHANOL 0.097 g/100mL



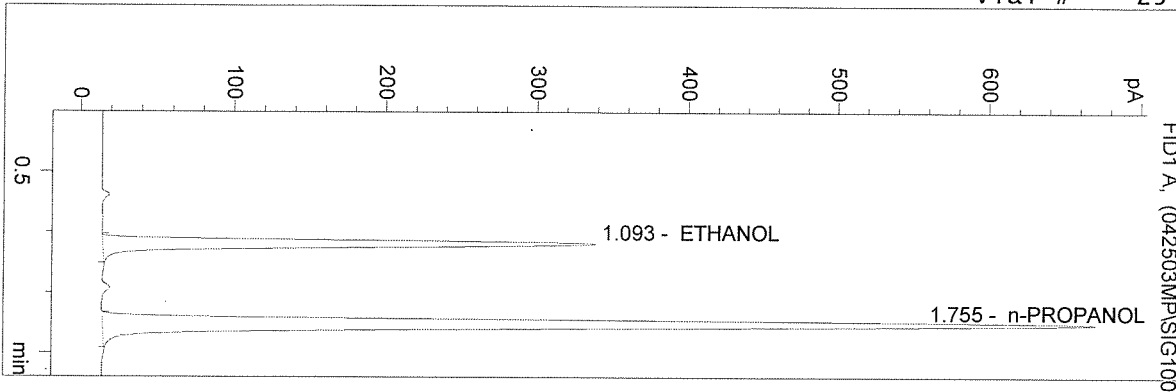
n-PROPANOL 1.000 g/100mL

WASHINGTON STATE TOXICOLOGY LABORATORY

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 Instrument 3  
 ALC1

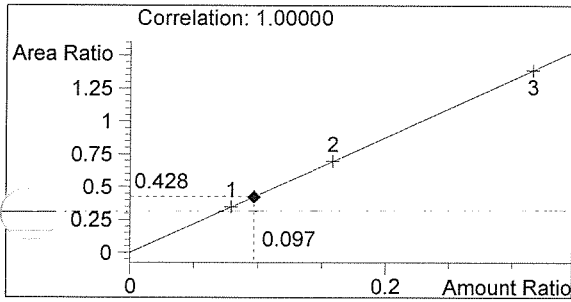
03011 0.08 QA  
 M PEMBERTON

vial # 25

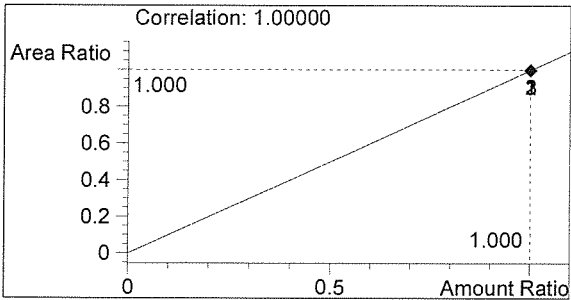


#	Compound	Area	RT
1	ETHANOL	1283	1.093
2	n-PROPANOL	2995	1.755

Totals:



ETHANOL 0.097 g/100mL



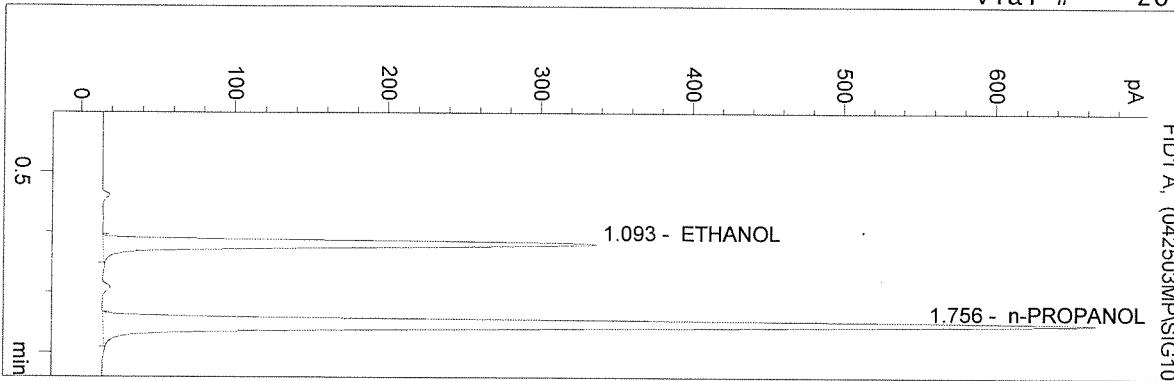
n-PROPANOL 1.000 g/100mL

WASHINGTON STATE TOXICOLOGY LABORATORY

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 Instrument 3  
 ALC1

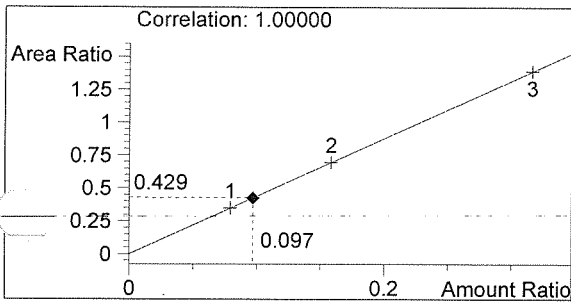
03011 0.08QA  
 M PEMBERTON

vial # 26

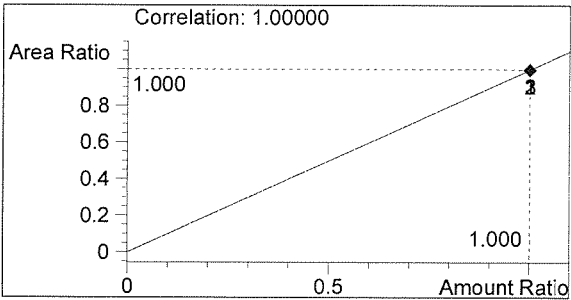


#	Compound	Area	RT
1	ETHANOL	1268	1.093
2	n-PROPANOL	2958	1.756

Totals:



ETHANOL 0.097 g/100mL



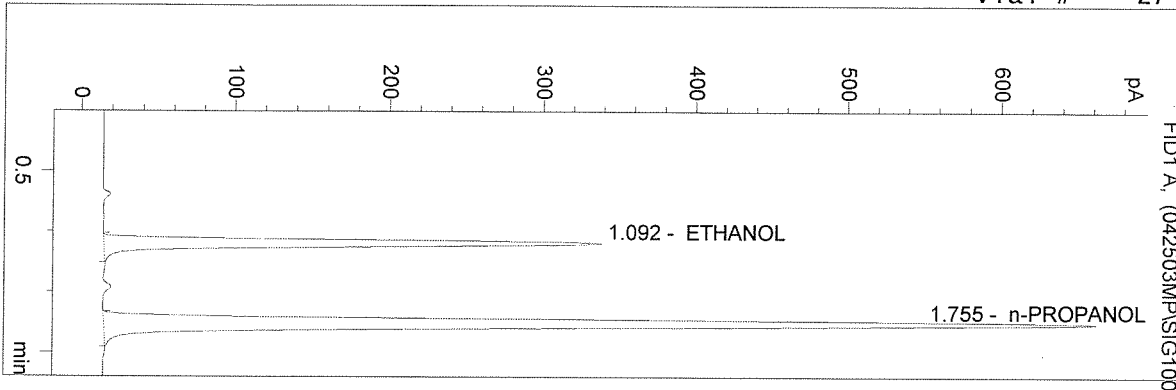
n-PROPANOL 1.000 g/100mL

WASHINGTON STATE TOXICOLOGY LABORATORY

C:\HPCHEM\1\METHODS\BLDALCO3.M  
 4/25/03 9:32:51 AM  
 Instrument 3  
 ALC1

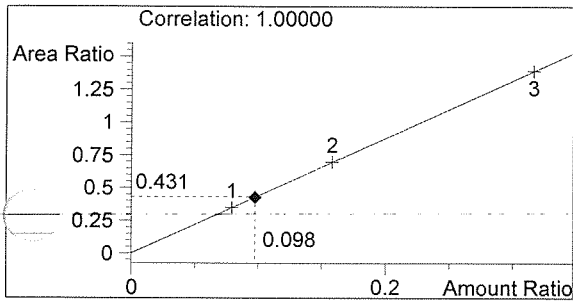
03011 0.08 QA  
 M PEMBERTON

vial # 27

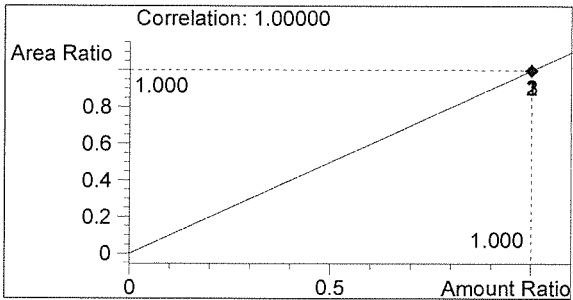


#	Compound	Area	RT
1	ETHANOL	1260	1.092
2	n-PROPANOL	2926	1.755

Totals:



ETHANOL 0.098 g/100mL



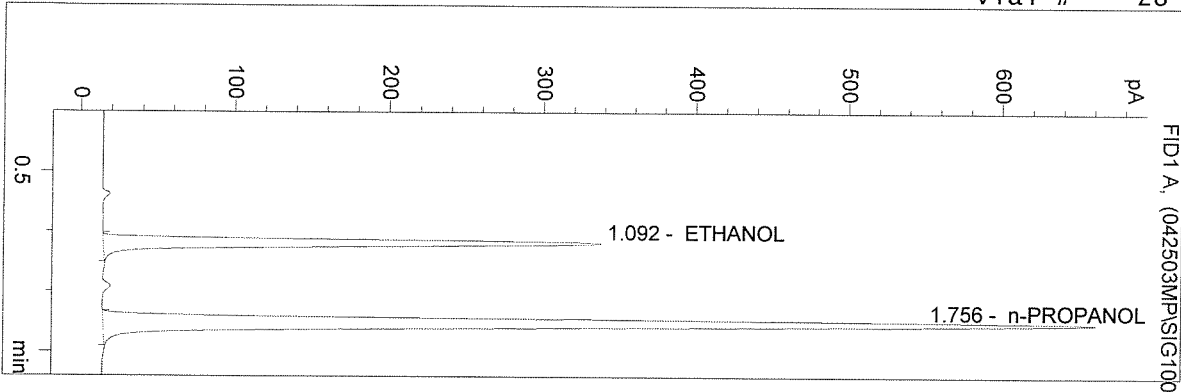
n-PROPANOL 1.000 g/100mL

WASHINGTON STATE TOXICOLOGY LABORATORY

C:\HPCHEM\1\METHODS\BLDALCO3.M  
 4/25/03 9:36:14 AM  
 Instrument 3  
 ALC1

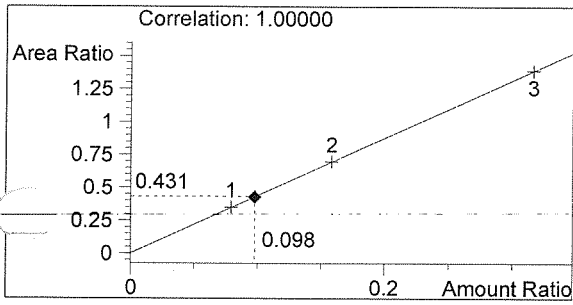
03011 0.08 QA  
 M PEMBERTON

vial # 28

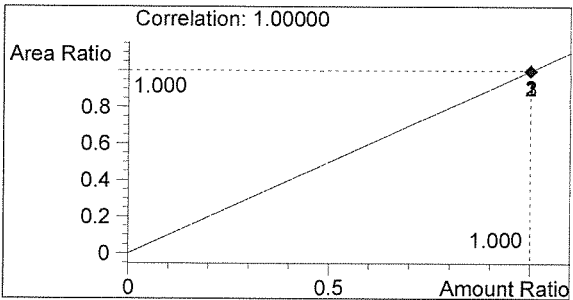


#	Compound	Area	RT
1	ETHANOL	1259	1.092
2	n-PROPANOL	2919	1.756

Totals:



ETHANOL 0.098 g/100mL



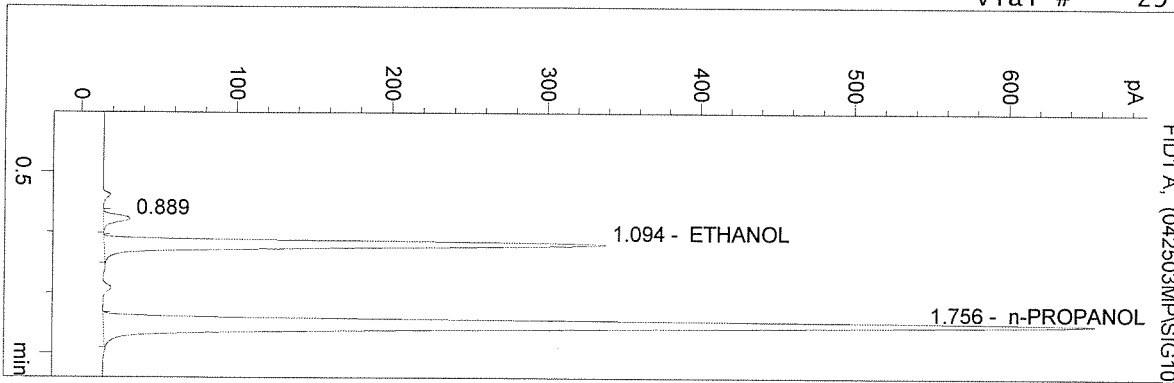
n-PROPANOL 1.000 g/100mL

WASHINGTON STATE TOXICOLOGY LABORATORY

C:\HPCHEM\1\METHODS\BLDALCO3.M  
 4/25/03 9:39:38 AM  
 Instrument 3  
 ALC1

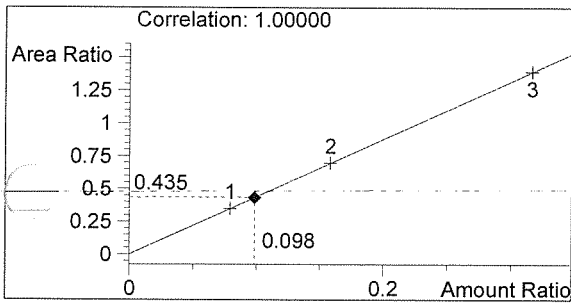
0.10 CONTROL  
 M PEMBERTON

vial # 29

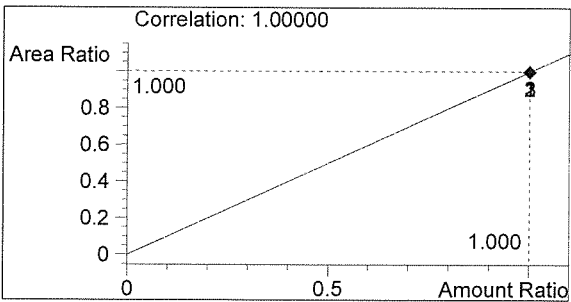


#	Compound	Area	RT
1		67	0.889
2	ETHANOL	1268	1.094
3	n-PROPANOL	2918	1.756

Totals:



ETHANOL 0.098 g/100mL



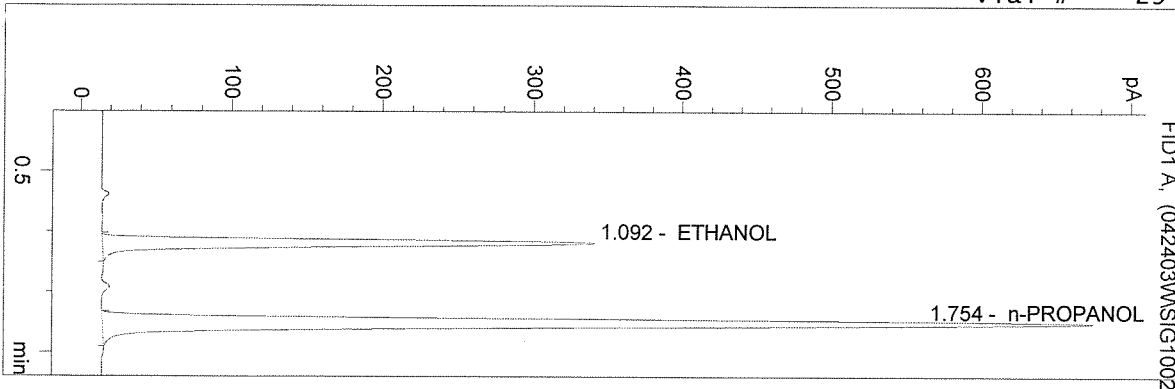
n-PROPANOL 1.000 g/100mL

WASHINGTON STATE TOXICOLOGY LABORATORY

C:\HPCHEM\1\METHODS\BLDALCO3.M  
 4/24/03 11:28:33 AM  
 Instrument 3  
 ALC1

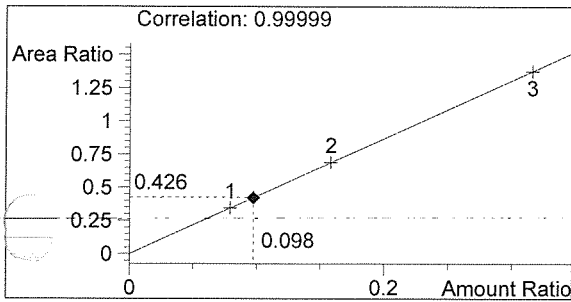
QA 03011  
 WP MARSHALL

vial # 29

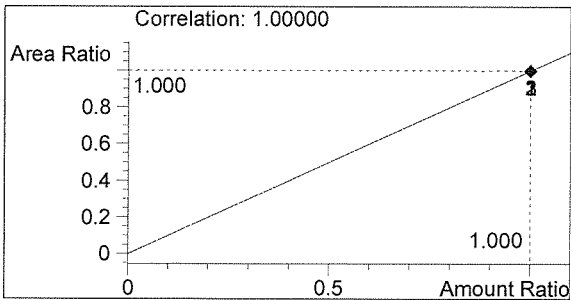


#	Compound	Area	RT
1	ETHANOL	1282	1.092
2	n-PROPANOL	3009	1.754

Totals:



ETHANOL 0.098 g/100mL



n-PROPANOL 1.000 g/100mL

STDS E  
 SIM 03008

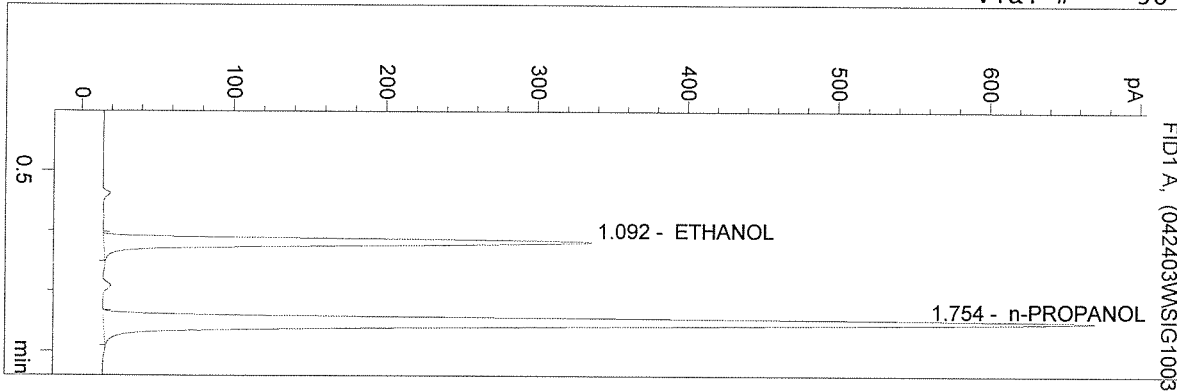


WASHINGTON STATE TOXICOLOGY LABORATORY

C:\HPCHEM\1\METHODS\BLDALCO3.M  
 4/24/03 11:31:56 AM  
 Instrument 3  
 ALC1

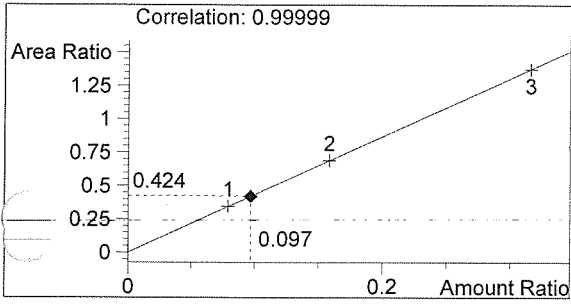
QA 03011  
 WP MARSHALL

vial # 30

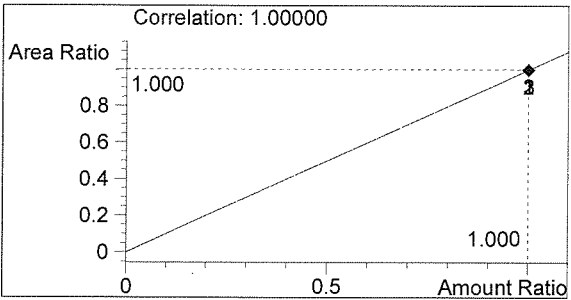


#	Compound	Area	RT
1	ETHANOL	1261	1.092
2	n-PROPANOL	2977	1.754

Totals:

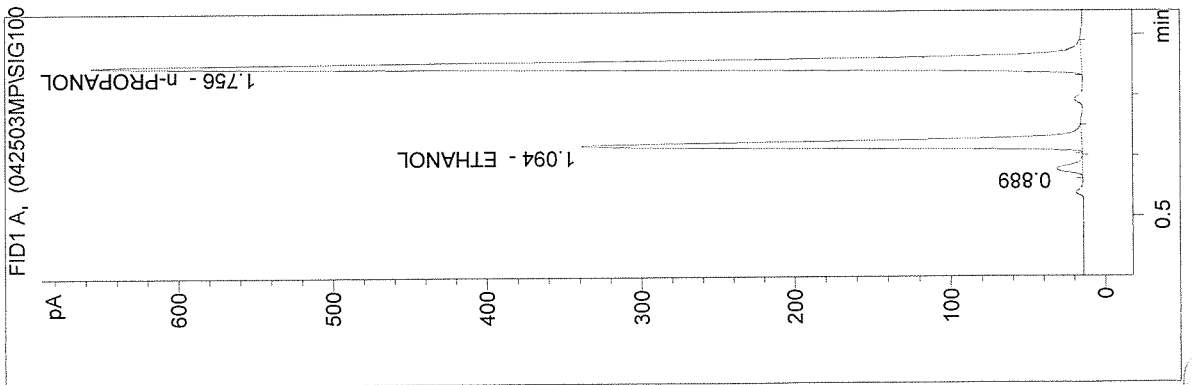


ETHANOL 0.097 g/100mL



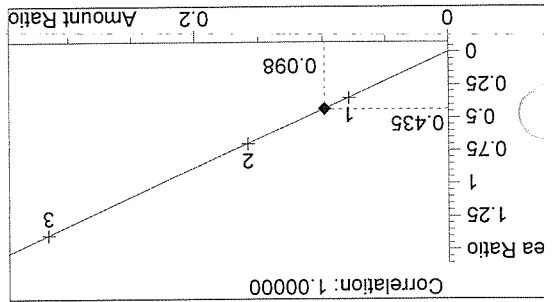
n-PROPANOL 1.000 g/100mL

0.10 CONTROL  
 M PEMBERTON  
 vial # 29

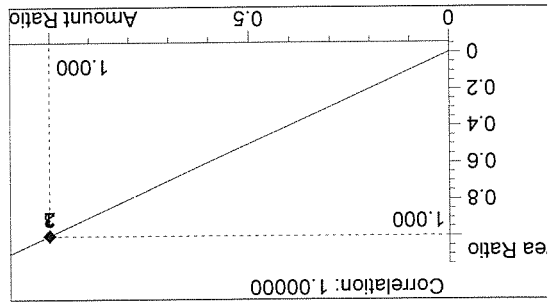


#	Compound	Area	RT
1		67	0.889
2	ETHANOL	1268	1.094
3	n-PROPANOL	2918	1.756

Totals:



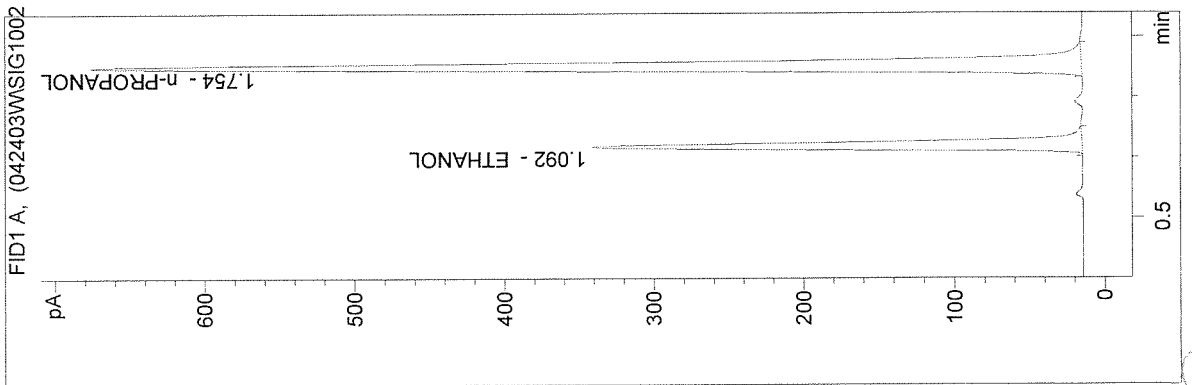
ETHANOL 0.098 g/100mL



n-PROPANOL 1.000 g/100mL

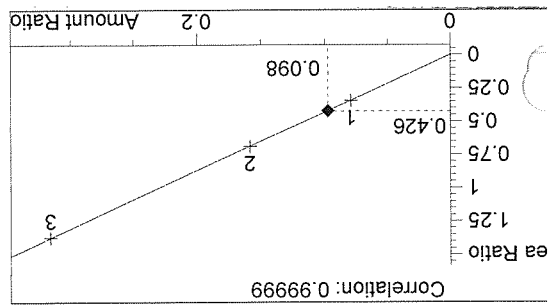
\HPCHEM\1\METHODS\BLDALCO3.M  
 24/03 11:28:33 AM  
 strument 3  
 ALC1

QA 03011  
 WP MARSHALL  
 vial # 29

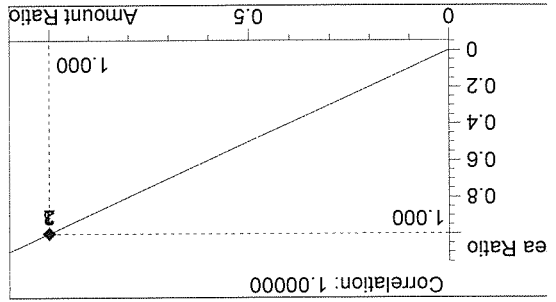


#	Compound	Area	RT
1	ETHANOL	1282	1.092
2	n-PROPANOL	3009	1.754

Totals:

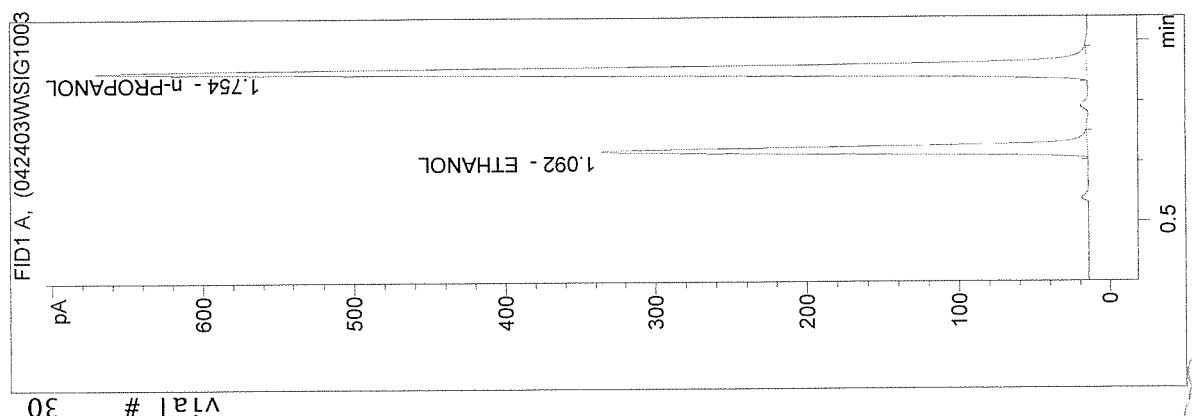


ETHANOL 0.098 g/100mL



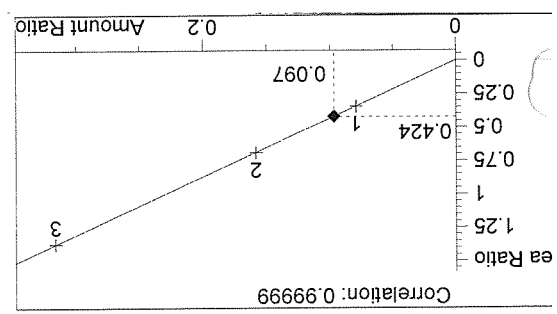
n-PROPANOL 1.000 g/100mL

STDS C  
 SIM 03008

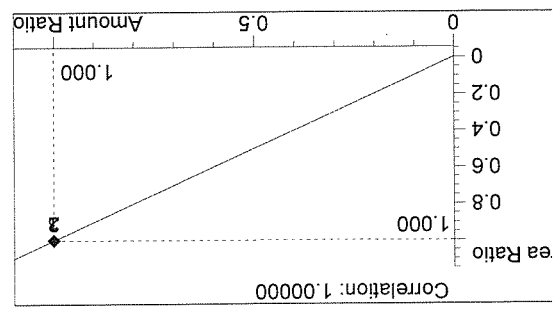


#	Compound	Area	RT
1	ETHANOL	1261	1.092
2	n-PROPANOL	2977	1.754

Totals:

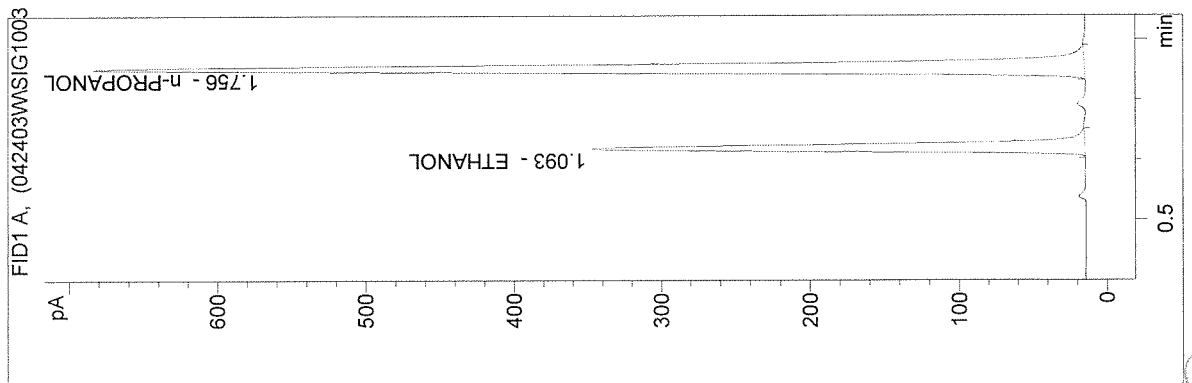


ETHANOL 0.097 g/100mL



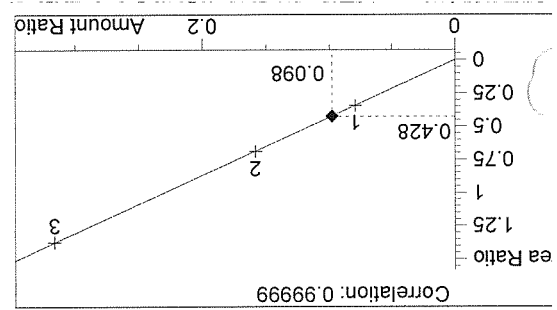
n-PROPANOL 1.000 g/100mL

QA 03011  
 WP MARSHALL  
 31

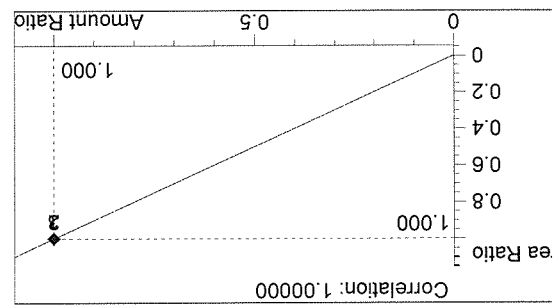


#	Compound	Area	RT
1	ETHANOL	1295	1.093
2	n-PROPANOL	3025	1.756

Totals:



ETHANOL 0.098 g/100mL

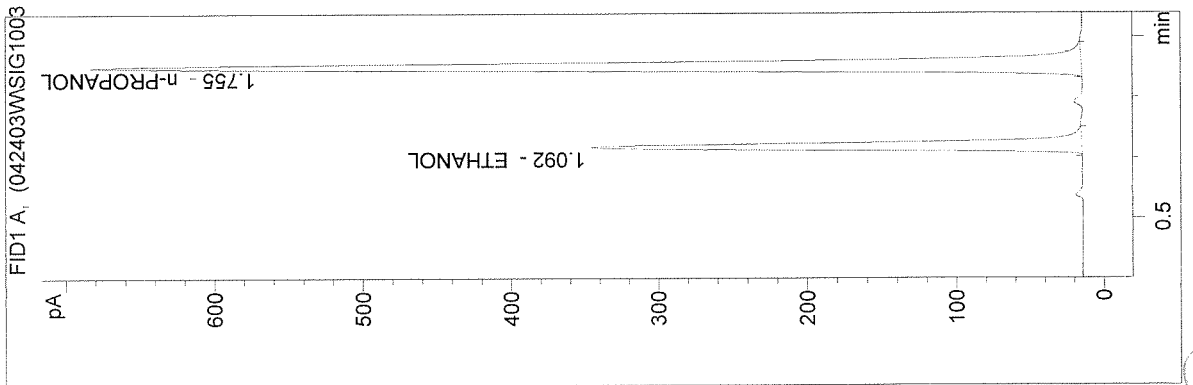


n-PROPANOL 1.000 g/100mL

\HPCHEM\1\METHODS\BLDLC03.M  
 24/03 11:38:41 AM  
 Instrument 3  
 ALC1

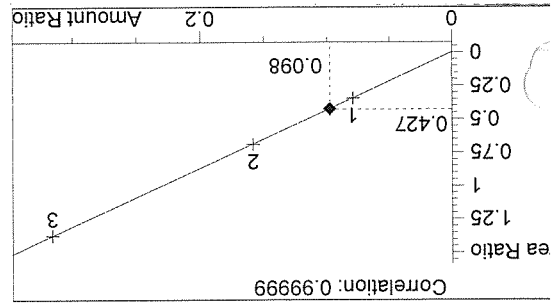
QA 03011  
 WP MARSHALL

vial # 32

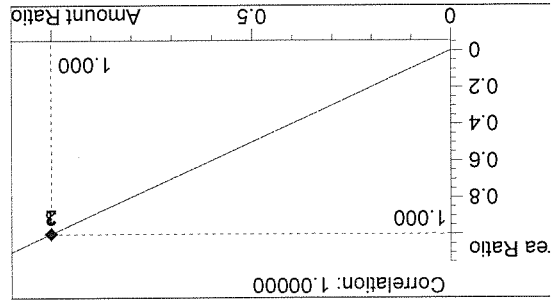


#	Compound	Area	RT
1	ETHANOL	1294	1.092
2	n-PROPANOL	3030	1.755

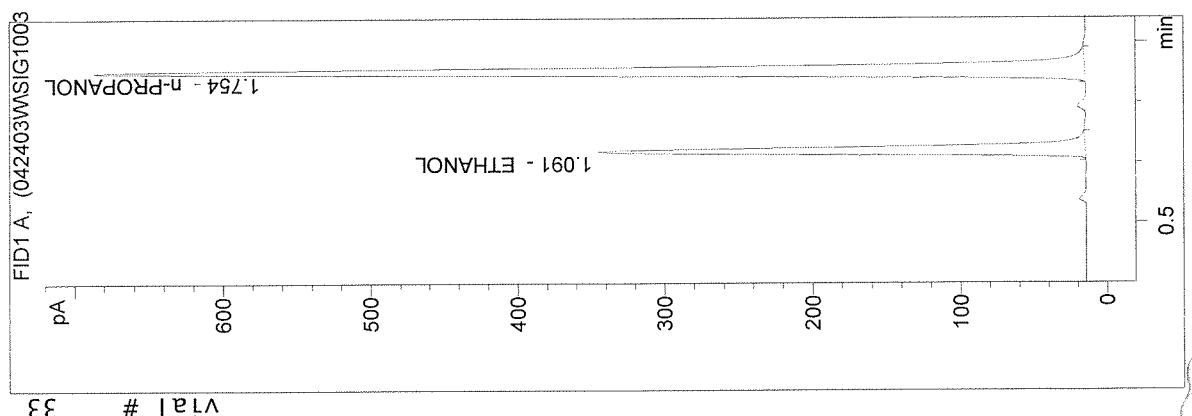
Totals:



ETHANOL 0.098 g/100mL

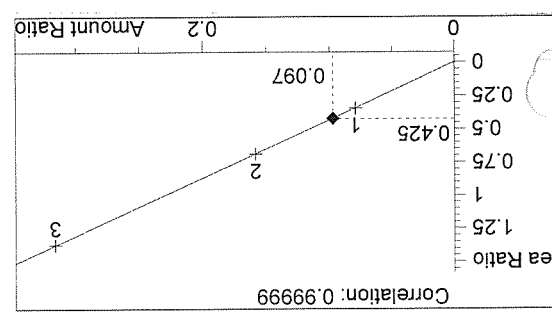


n-PROPANOL 1.000 g/100mL

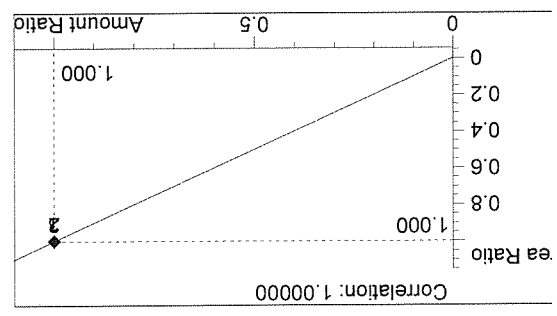


#	Compound	Area	RT
1	ETHANOL	1293	1.091
2	n-PROPANOL	3043	1.754

Totals :

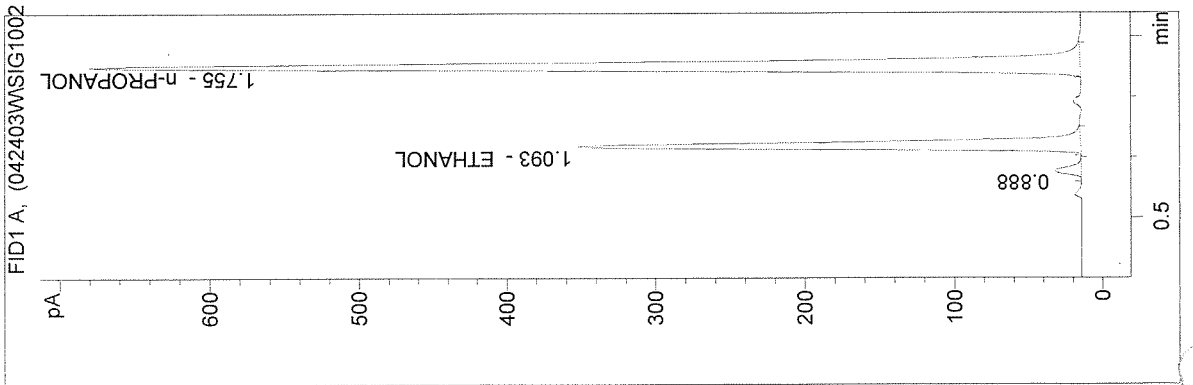


ETHANOL 0.097 g/100mL



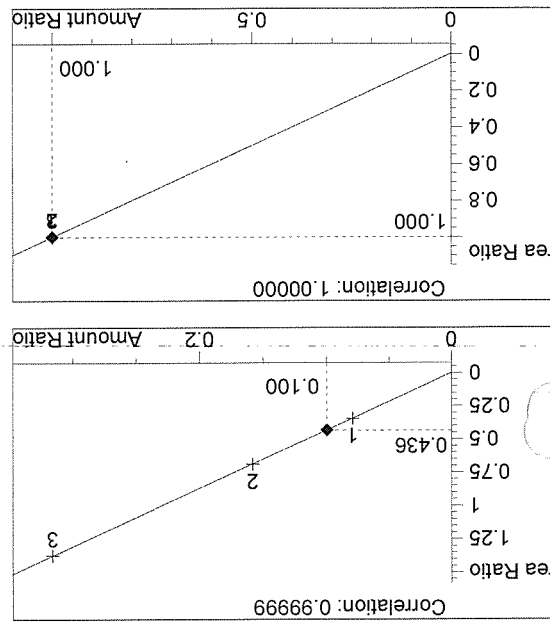
n-PROPANOL 1.000 g/100mL

0.100 CONTROL  
 WP MARSHALL  
 vial # 27



#	Compound	Area	RT
1	ETHANOL	69	0.888
2	ETHANOL	1316	1.093
3	n-PROPANOL	3017	1.755

Totals:



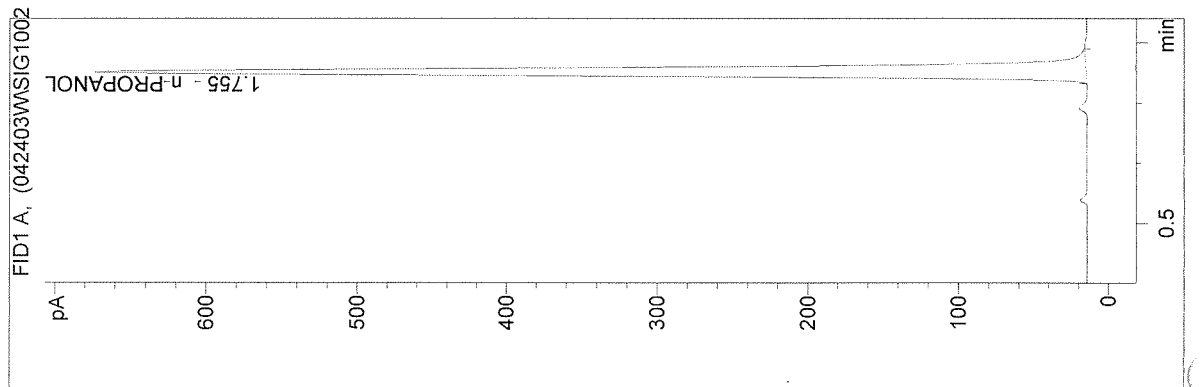
ETHANOL 0.100 g/100mL

n-PROPANOL 1.000 g/100mL



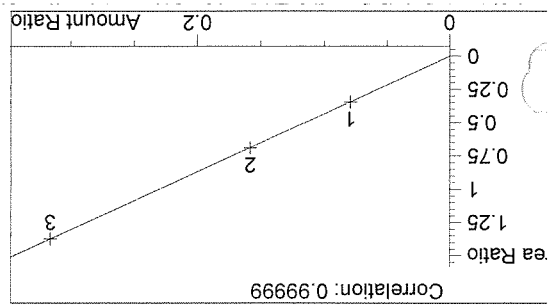
BLANK  
 WP MARSHALL

vial # 28

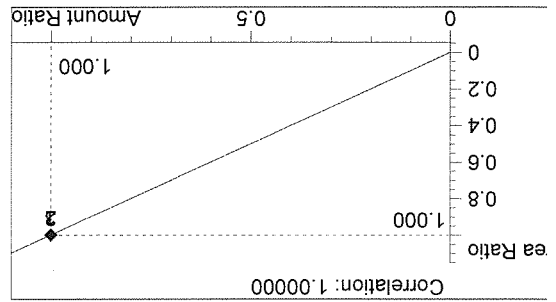


#	Compound	Area	RT
1	ETHANOL	0	0.000
2	n-PROPANOL	2994	1.755

Totals:



ETHANOL 0.000 g/100mL



n-PROPANOL 1.000 g/100mL