

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**

Date: 9/17/2003

Batch number **03032**

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	0.130	0.126	0.128									
2	0.128	0.127	0.127									
3	0.129	0.127	0.129									
4	0.130	0.126	0.127									
5	0.130	0.127	0.127									
Ctrl	0.102	0.099	0.098									

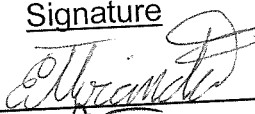
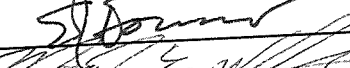

External Control:

Lot #: A024546 Exp date: 09/05
 Target concentration: 0.10 g/100mL

Statistics:

Avg. solution concent.: 0.1279 g/100 mL
 SD: 0.00141
 Range (3xSD): 0.1236 to 0.1321
 Precision CV (%): 1.1007 %

Equivalent vapor concent.: 0.1040 g/210L

Analyst	Name	Signature	Date
1	Estuardo J. Miranda		09/17/03
2	Edward Formoso		09/17/03
3	Mary E Wilson		09/19/03
4			
5			
6			
7			
8			
9			
10			
11			
12			

Prepared by: Estuardo J. Miranda according to the approved protocol



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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 03032 was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.1279 grams per 100ml.

Dated: 9/23/03
Seattle, WA

Estuardo J. Miranda
Forensic Toxicologist

EM/bf
EMQA





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BAC VERIFIER DATAMASTER QUALITY ASSURANCE SOLUTION
CERTIFICATION

I, Edward J. Formoso, 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 Chemistry and twenty-eight years experience in the Washington State Toxicology Laboratory.

The quality assurance solution, Lot Number 03032, was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.1279 grams per 100ml.

Dated: 9/23/03
Seattle, WA

Edward J. Formoso
Forensic Toxicologist

EJF/bf
EFQA





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BAC VERIFIER DATAMASTER QUALITY ASSURANCE SOLUTION
CERTIFICATION


I, Mary E. Wilson, 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 with two years of experience in toxicology, including one year in the Washington State Toxicology Laboratory.

The quality assurance solution, Lot Number 03032, was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.1279 grams per 100ml.

Dated: 9/23/03
Seattle, WA


Mary E. Wilson
Forensic Toxicologist

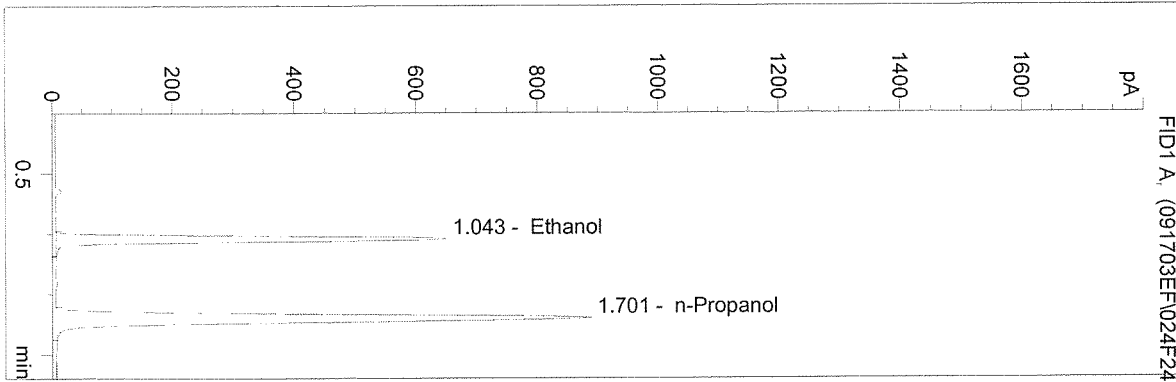
MEW/bf
MEWQA



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 ALC1

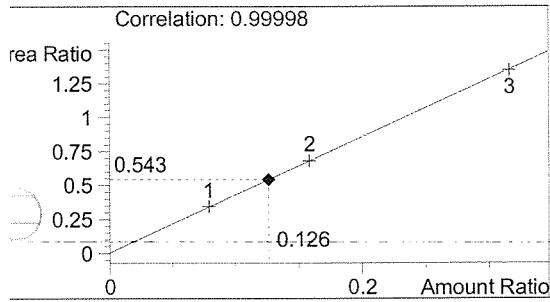
03032
 ED FORMOSO

vial # 24

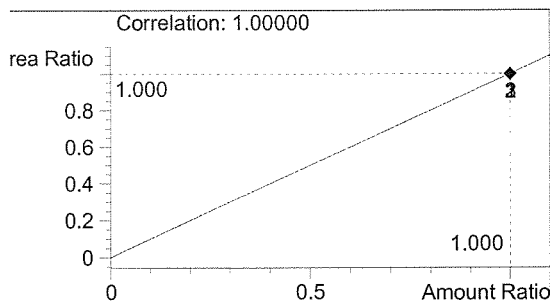


#	Compound	Area	RT
1	Ethanol	2065	1.043
2	n-Propanol	3800	1.701

Totals:



Ethanol 0.126 g/100ml

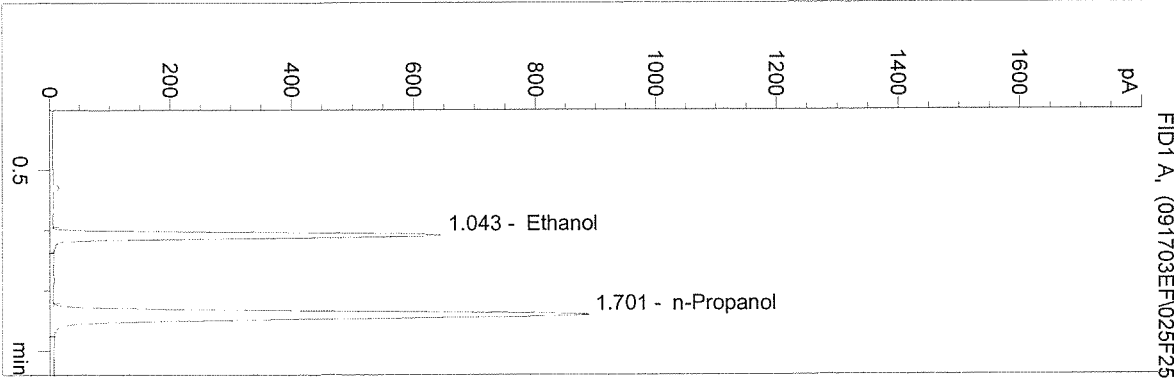


n-Propanol 1.000 g/100ml

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 Instrument 1
 ALC1

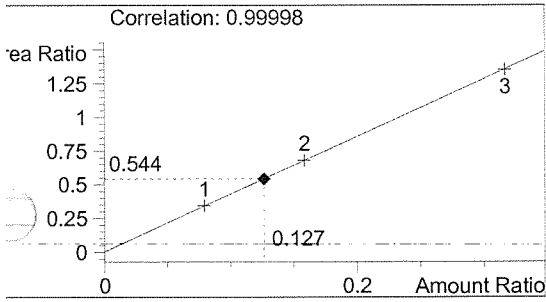
03032
 ED FORMOSO

vial # 25

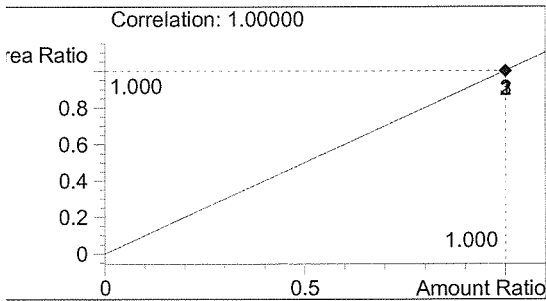


#	Compound	Area	RT
1	Ethanol	2074	1.043
2	n-Propanol	3813	1.701

Totals:



Ethanol 0.127 g/100ml



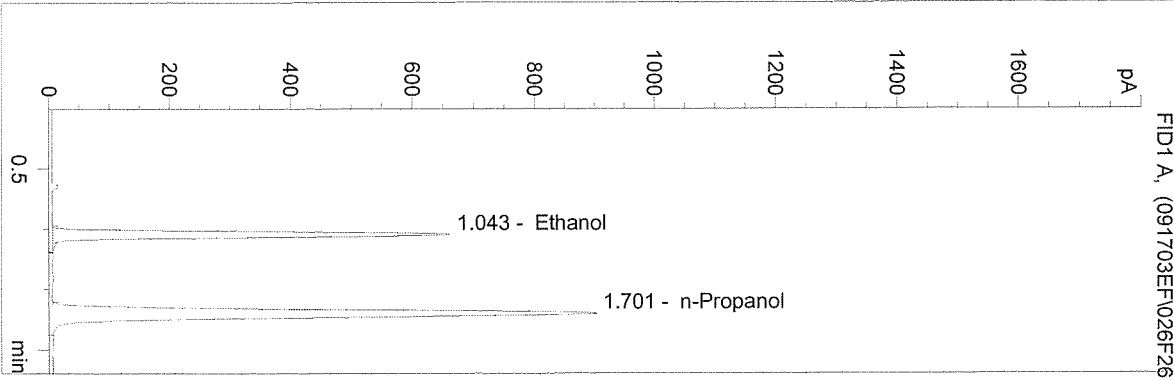
n-Propanol 1.000 g/100ml

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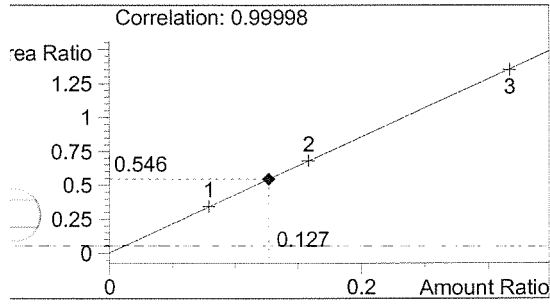
03032
 ED FORMOSO

vial # 26

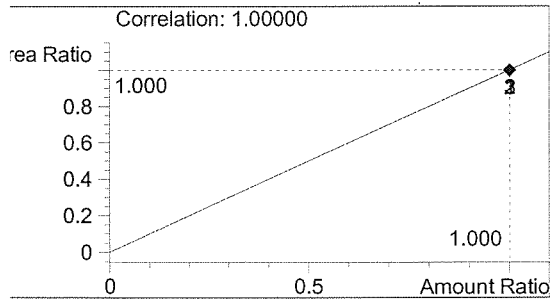


#	Compound	Area	RT
1	Ethanol	2108	1.043
2	n-Propanol	3863	1.701

Totals:



Ethanol 0.127 g/100ml

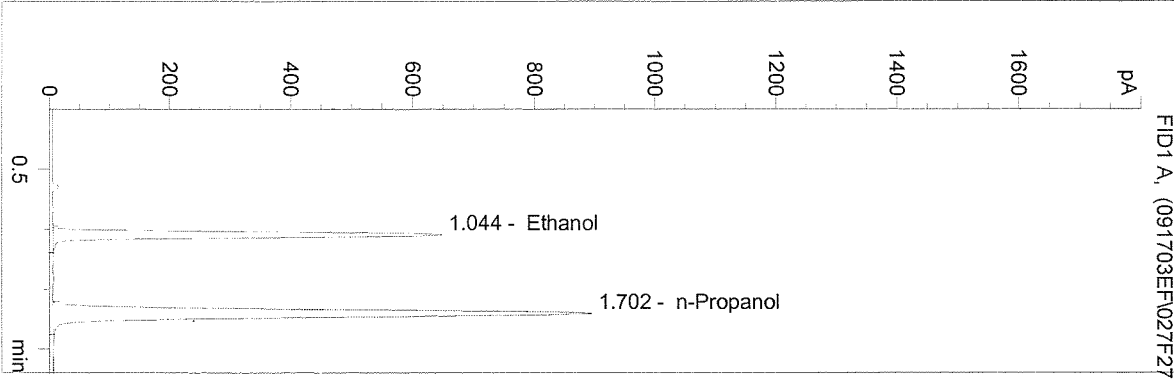


n-Propanol 1.000 g/100ml

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 Instrument 1
 ALC1

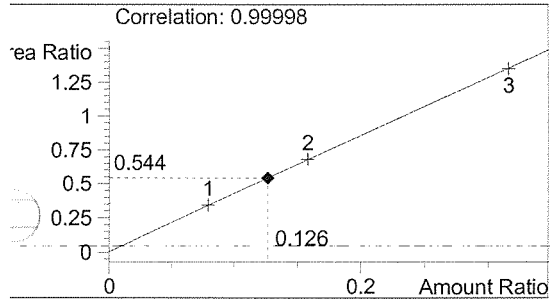
03032
 ED FORMOSO

vial # 27

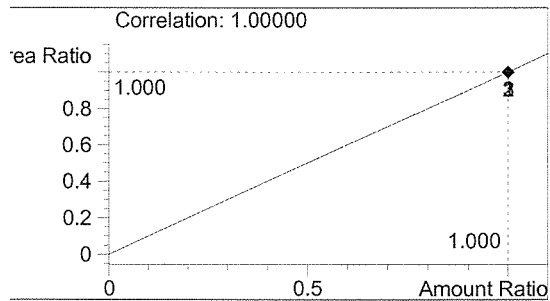


#	Compound	Area	RT
1	Ethanol	2089	1.044
2	n-Propanol	3841	1.702

Totals:



Ethanol 0.126 g/100ml



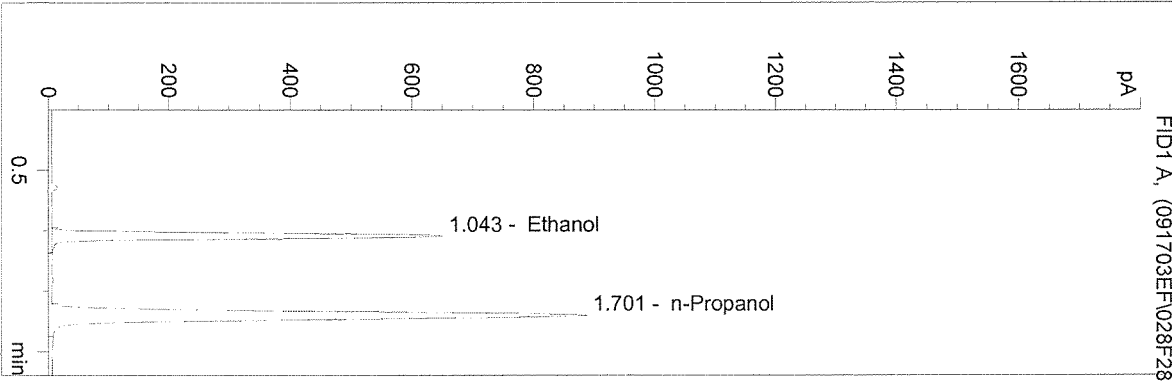
n-Propanol 1.000 g/100ml

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 ALC1

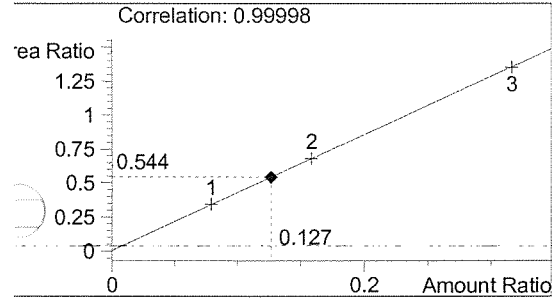
03032
 ED FORMOSO

vial # 28

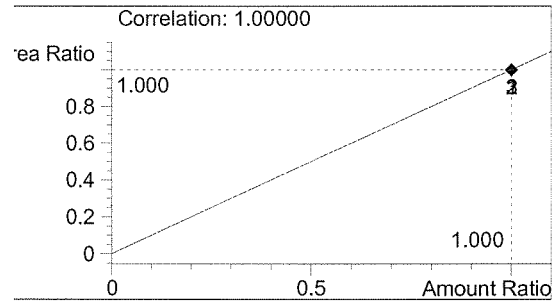


#	Compound	Area	RT
1	Ethanol	2066	1.043
2	n-Propanol	3794	1.701

Totals:



Ethanol 0.127 g/100ml



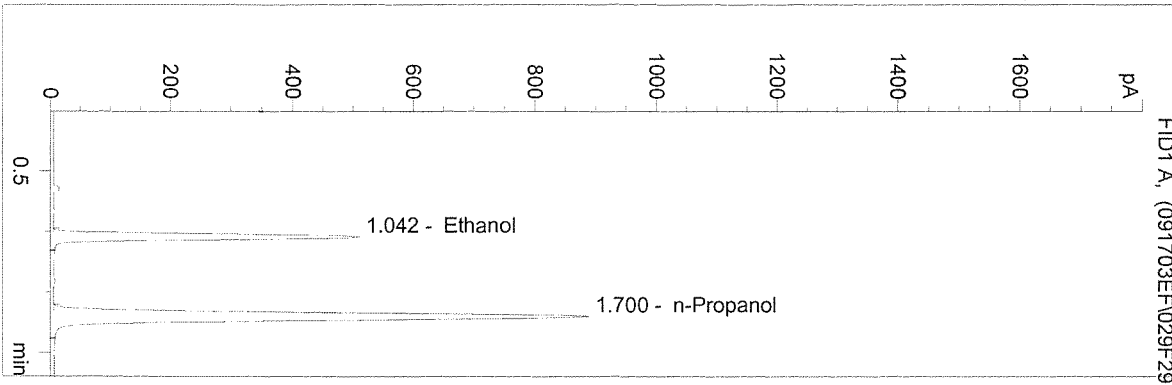
n-Propanol 1.000 g/100ml

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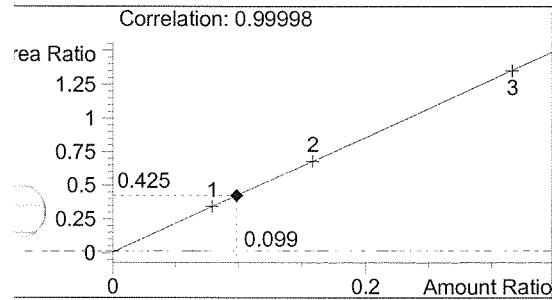
0.10 CONTROL
 ED FORMOSO

vial # 29

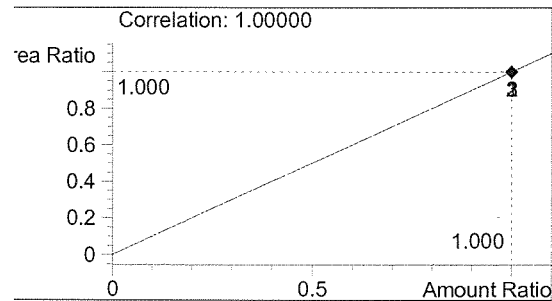


#	Compound	Area	RT
1	Ethanol	1607	1.042
2	n-Propanol	3780	1.700

Totals:



Ethanol 0.099 g/100ml

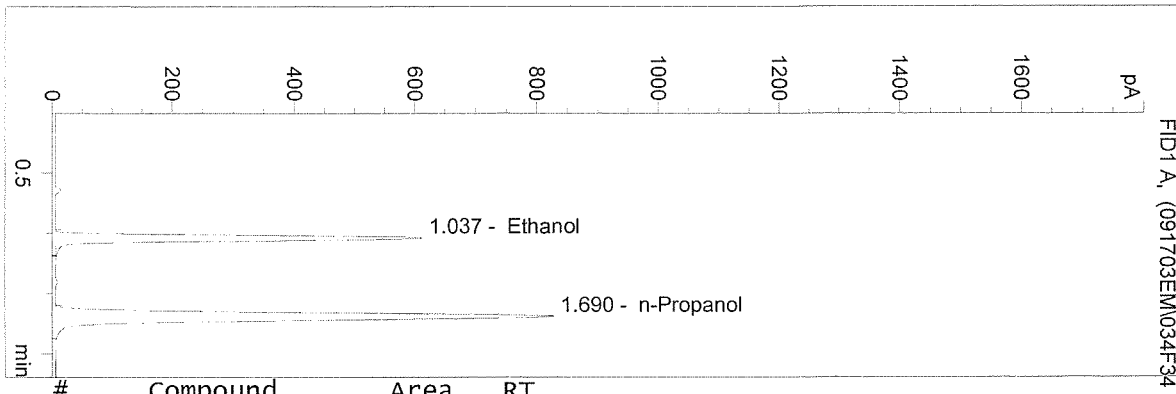


n-Propanol 1.000 g/100ml

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 Instrument 2
 ALC1

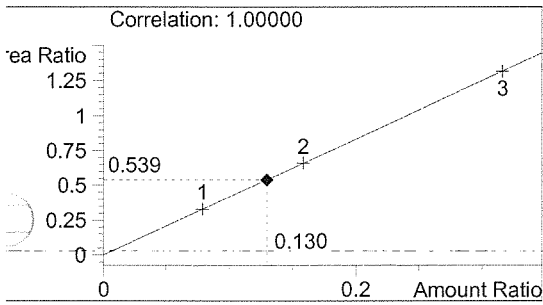
03032 Q.A. Sol.
 Estuardo J. Miranda

vial # 34

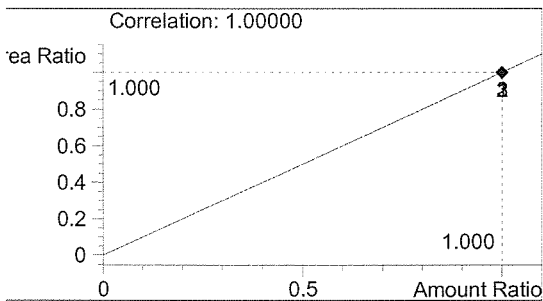


#	Compound	Area	RT
1	Ethanol	1889	1.037
2	n-Propanol	3503	1.690

Totals:



Ethanol 0.130 g/100ml

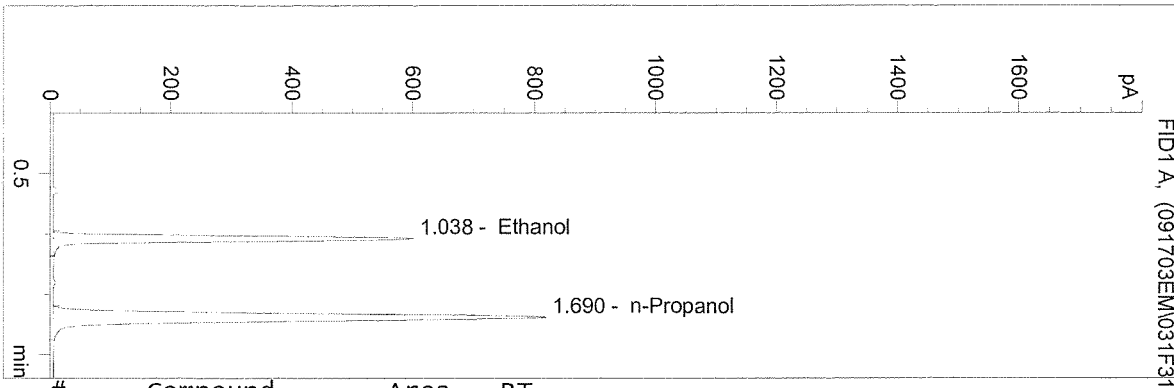


n-Propanol 1.000 g/100ml

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 Instrument 2
 ALC1

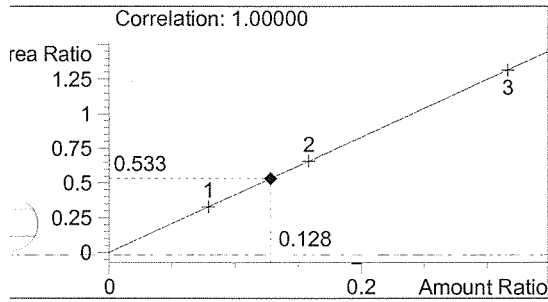
03032 Q.A. Sol.
 Estuardo J. Miranda

vial # 31

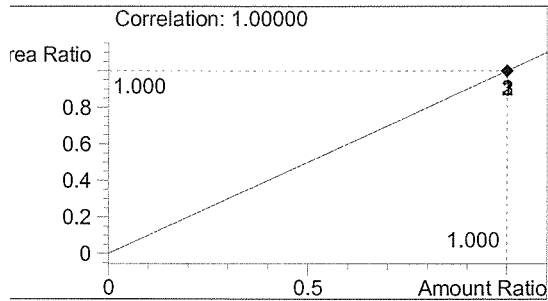


#	Compound	Area	RT
1	Ethanol	1844	1.038
2	n-Propanol	3459	1.690

Totals:



Ethanol 0.128 g/100ml

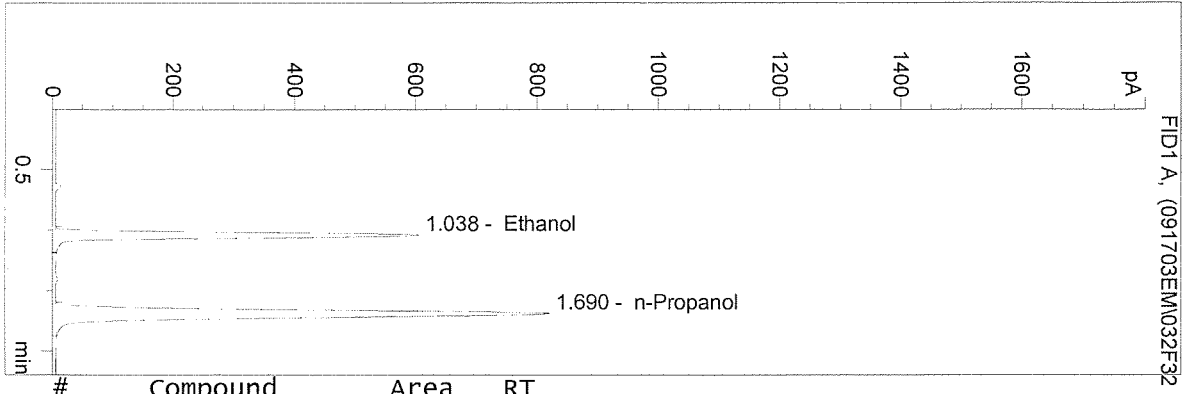


n-Propanol 1.000 g/100ml

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 Instrument 2
 ALC1

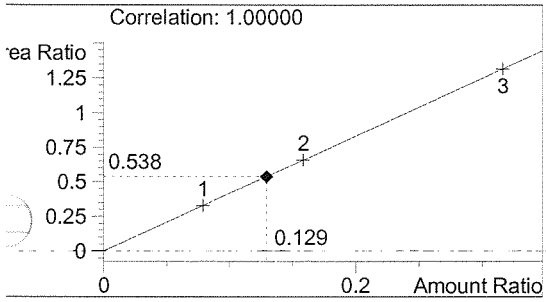
03032 Q.A. Sol.
 Estuardo J. Miranda

vial # 32

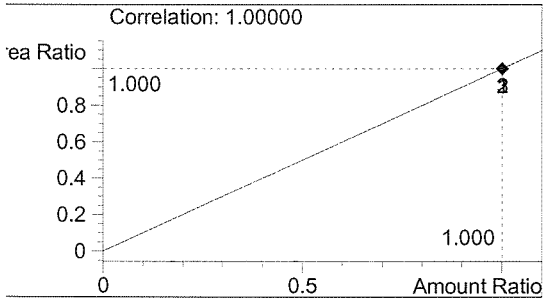


#	Compound	Area	RT
1	Ethanol	1866	1.038
2	n-Propanol	3465	1.690

Totals:



Ethanol 0.129 g/100ml

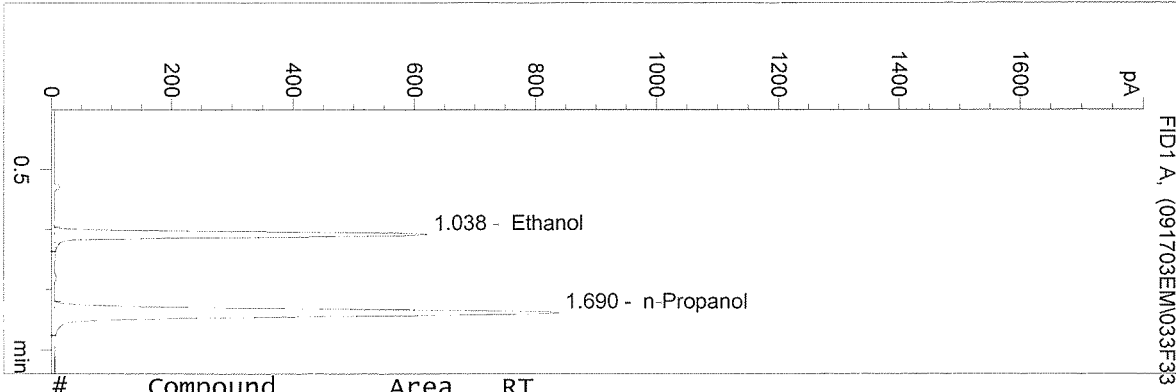


n-Propanol 1.000 g/100ml

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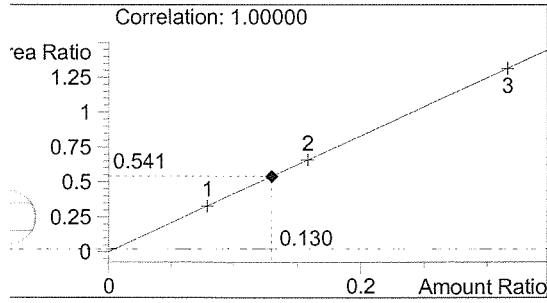
03032 Q.A. Sol.
 Estuardo J. Miranda

vial # 33

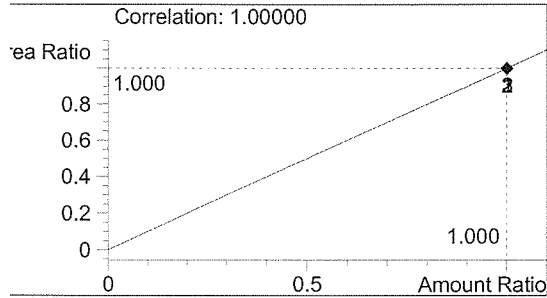


#	Compound	Area	RT
1	Ethanol	1919	1.038
2	n-Propanol	3549	1.690

Totals:



Ethanol 0.130 g/100ml



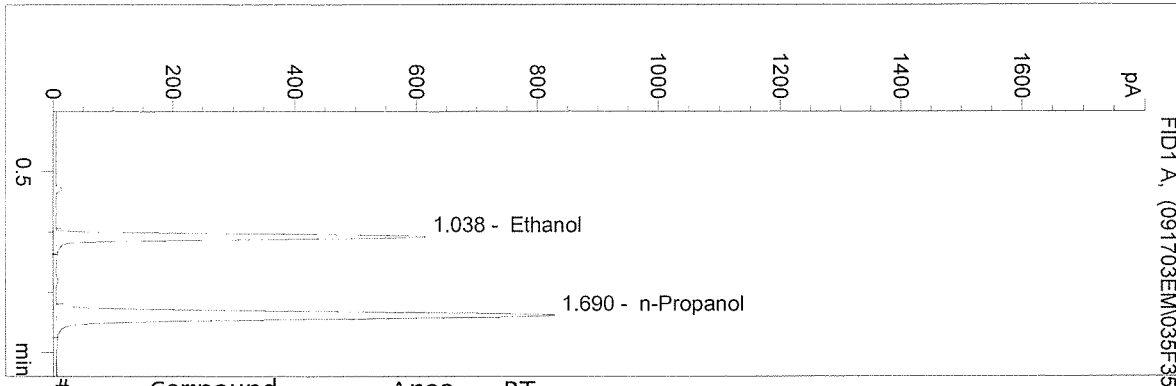
n-Propanol 1.000 g/100ml

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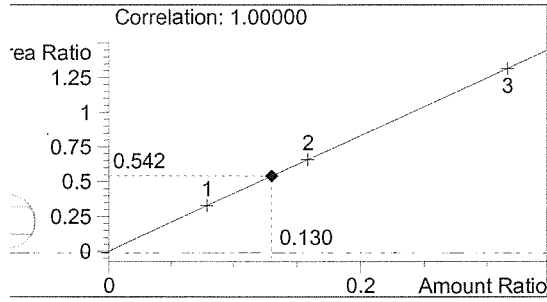
03032 Q.A. Sol.
 Estuardo J. Miranda

vial # 35

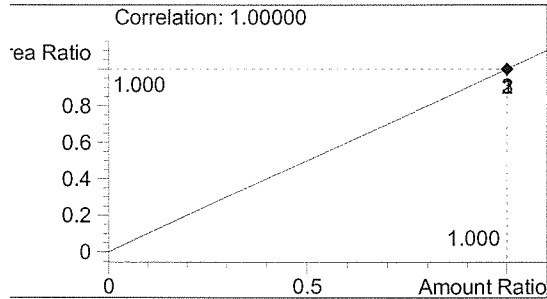


#	Compound	Area	RT
1	Ethanol	1901	1.038
2	n-Propanol	3509	1.690

Totals:



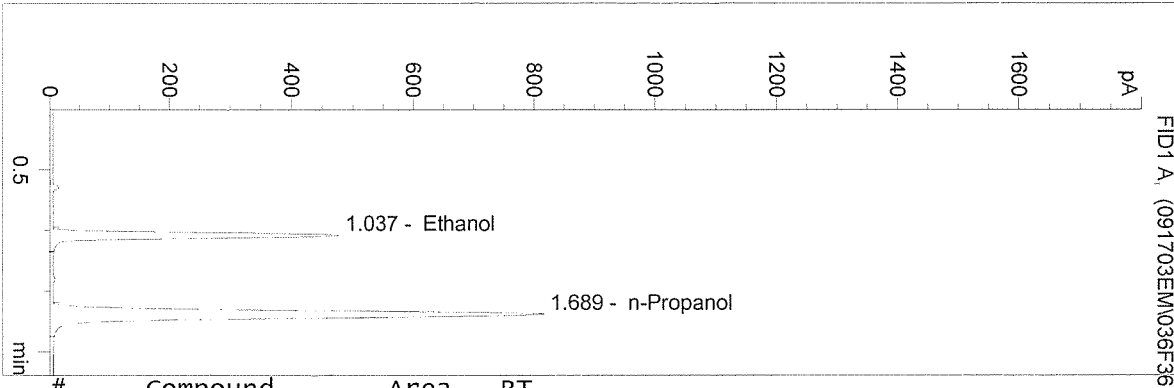
Ethanol 0.130 g/100ml



n-Propanol 1.000 g/100ml

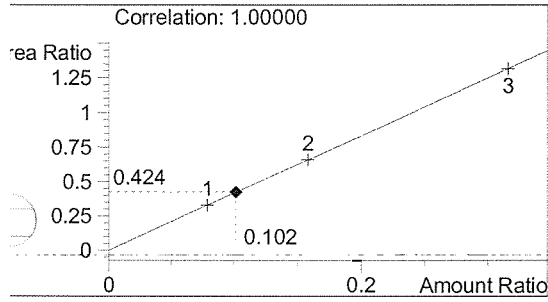
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 Instrument 2
 ALC1

0.100 Control
 Estuardo J. Miranda
 vial # 36

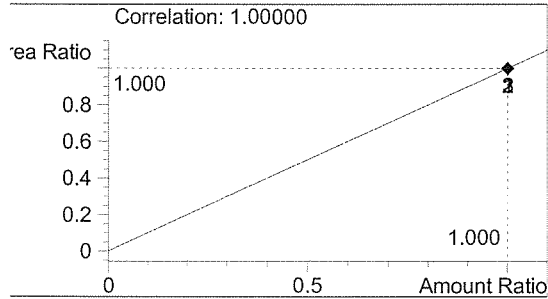


#	Compound	Area	RT
1	Ethanol	1463	1.037
2	n-Propanol	3448	1.689

Totals:



Ethanol 0.102 g/100ml

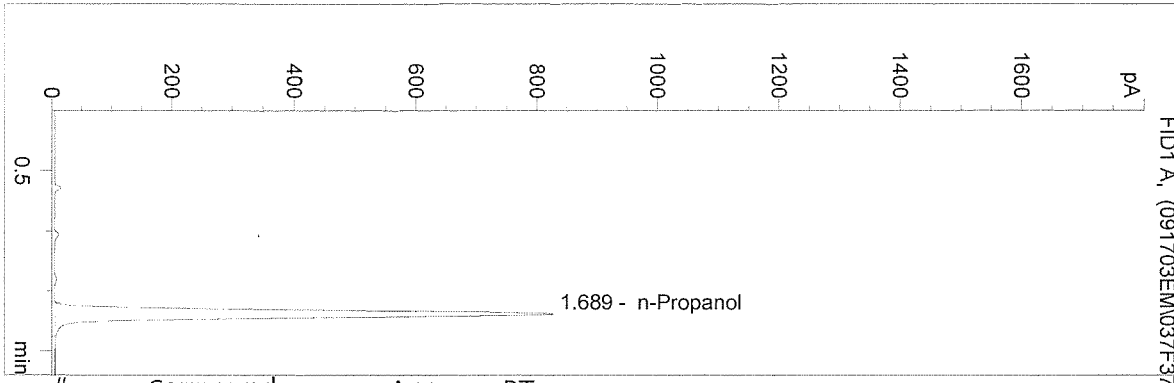


n-Propanol 1.000 g/100ml

WASHINGTON STATE TOXICOLOGY LABORATORY

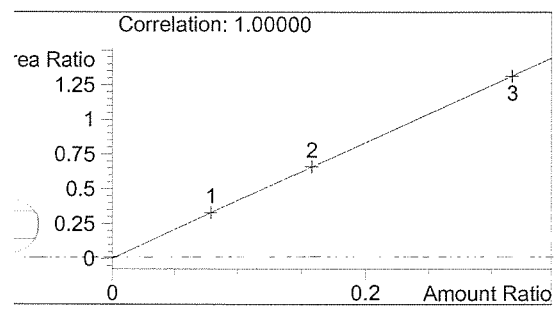
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 Instrument 2
 ALC1

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 Estuardo J. Miranda
 vial # 37

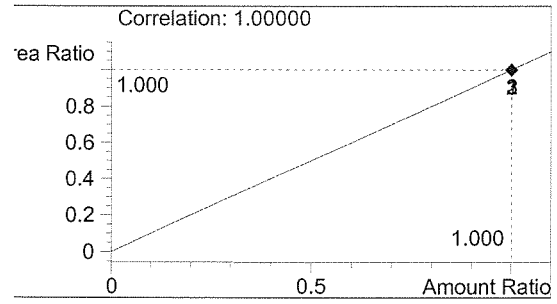


#	Compound	Area	RT
1	Ethanol	0	0.000
2	n-Propanol	3500	1.689

Totals:



Ethanol 0.000 g/100ml



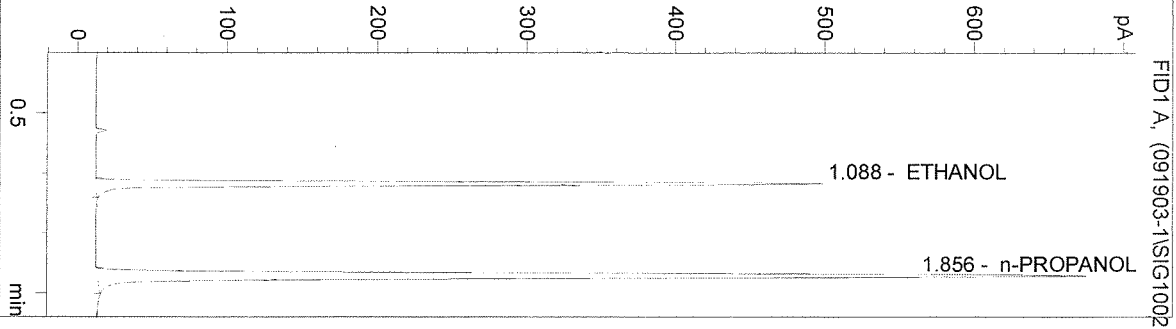
n-Propanol 1.000 g/100ml

WASHINGTON STATE TOXICOLOGY LABORATORY

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 Instrument 3

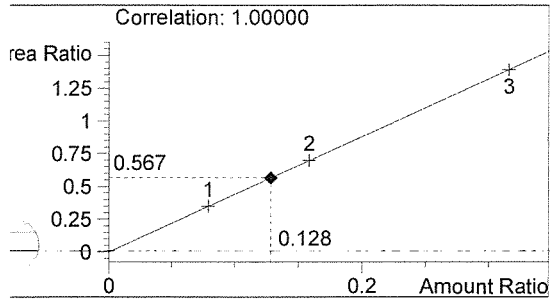
03032QA
 MARY WILSON

vial # 21

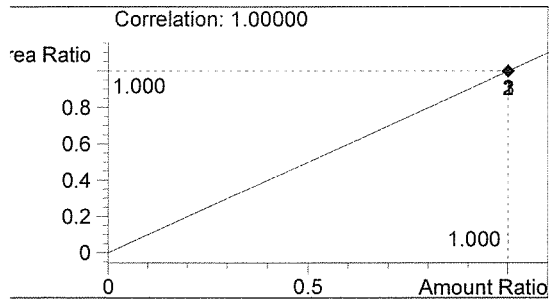


#	Compound	Area	RT
1	ETHANOL	1082	1.088
2	n-PROPANOL	1909	1.856

Totals:



ETHANOL 0.128 g/100mL

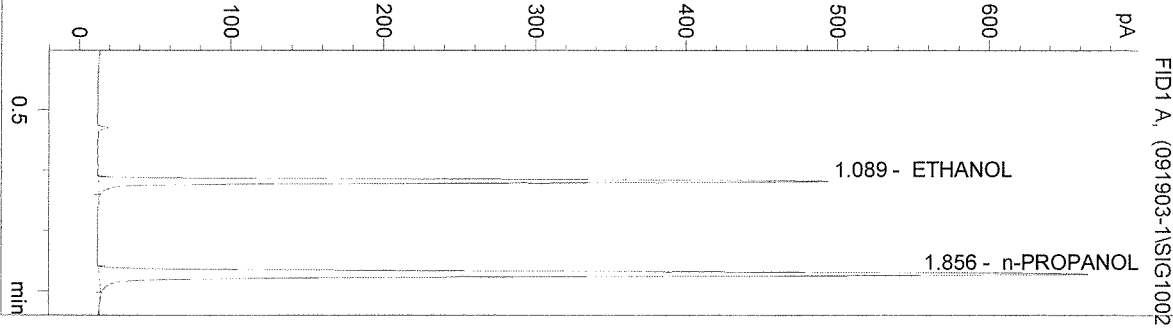


n-PROPANOL 1.000 g/100mL

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 Instrument 3

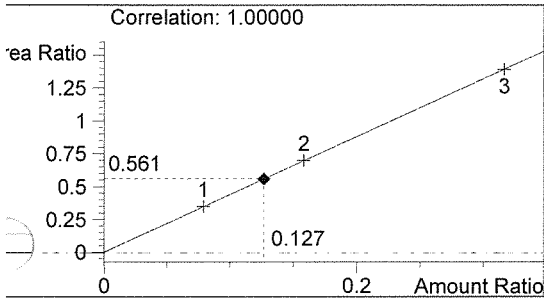
03032QA
 MARY WILSON

vial # 22

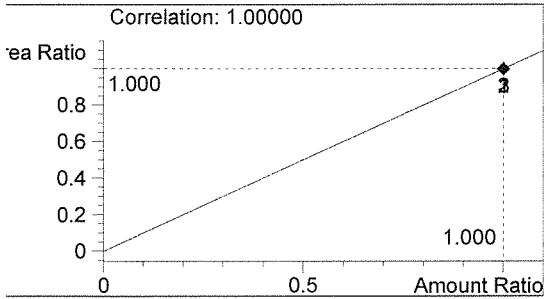


#	Compound	Area	RT
1	ETHANOL	1045	1.089
2	n-PROPANOL	1864	1.856

Totals:



ETHANOL 0.127 g/100mL



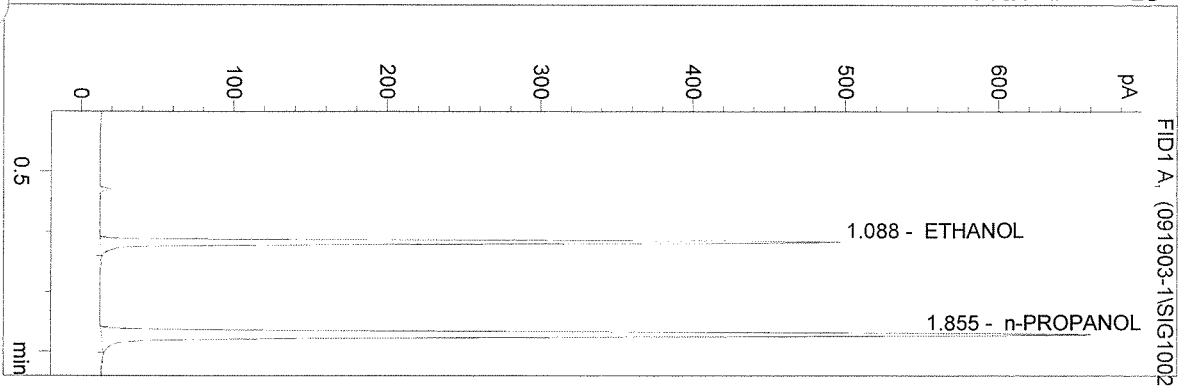
n-PROPANOL 1.000 g/100mL

WASHINGTON STATE TOXICOLOGY LABORATORY

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 Instrument 3

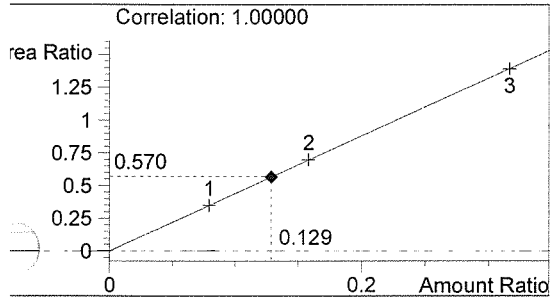
03032QA
 MARY WILSON

vial # 23

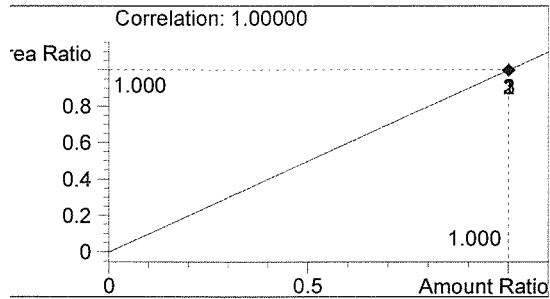


#	Compound	Area	RT
1	ETHANOL	1053	1.088
2	n-PROPANOL	1849	1.855

Totals:



ETHANOL 0.129 g/100mL

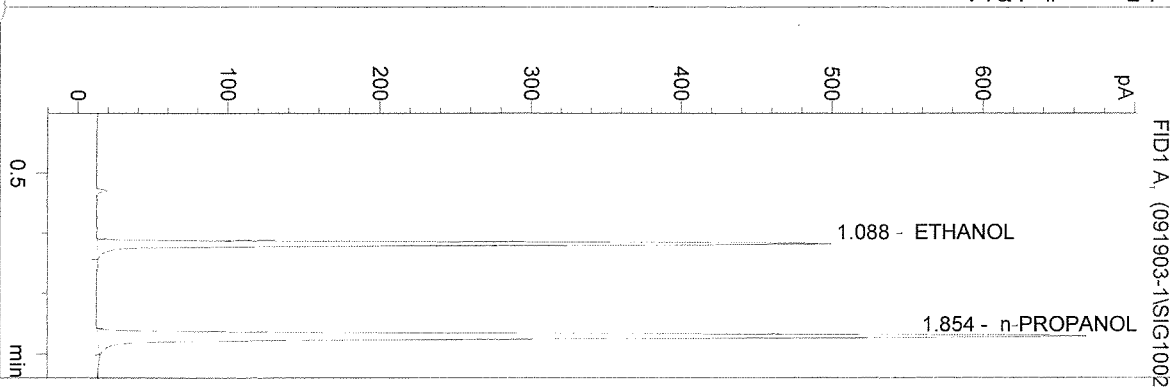


n-PROPANOL 1.000 g/100mL

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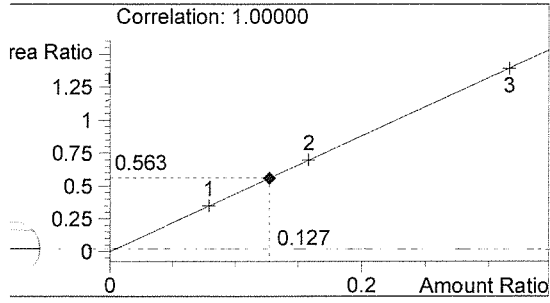
03032QA
 MARY WILSON

vial # 24

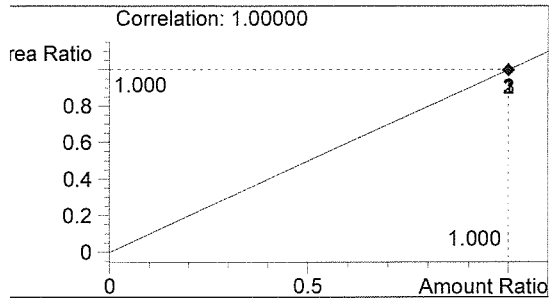


#	Compound	Area	RT
1	ETHANOL	1057	1.088
2	n-PROPANOL	1877	1.854

Totals:



ETHANOL 0.127 g/100mL

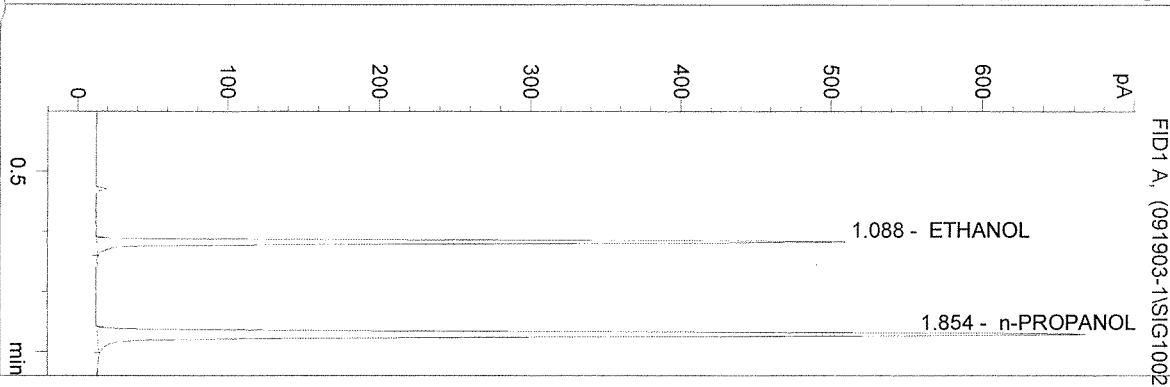


n-PROPANOL 1.000 g/100mL

:\HPCHEM\1\METHODS\BLDALCO3.M
 /19/03 10:39:45 AM
 Instrument 3

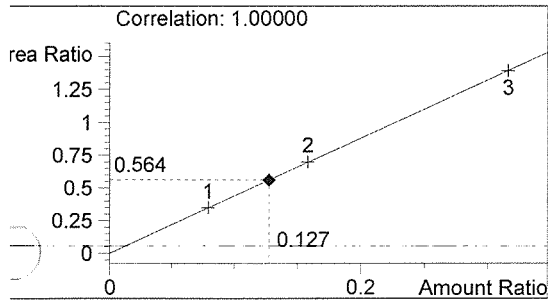
03032QA
 MARY WILSON

vial # 25

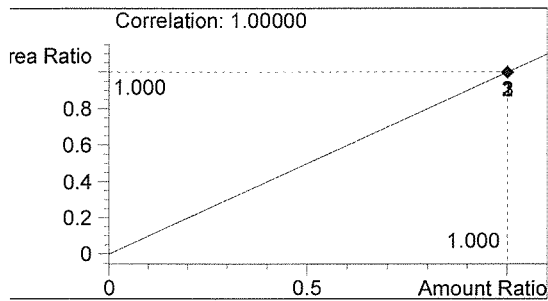


#	Compound	Area	RT
1	ETHANOL	1050	1.088
2	n-PROPANOL	1863	1.854

Totals:



ETHANOL 0.127 g/100mL

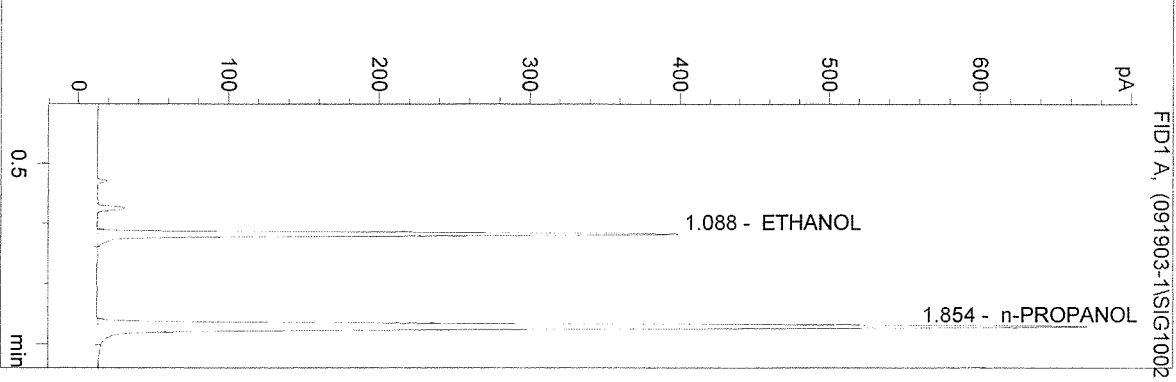


n-PROPANOL 1.000 g/100mL

:\HPCHEM\1\METHODS\BLDALCO3.M
 /19/03 10:42:49 AM
 nstrument 3

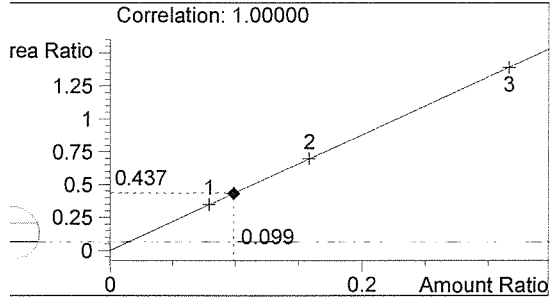
0.10CTL
 MARY WILSON

vial # 26

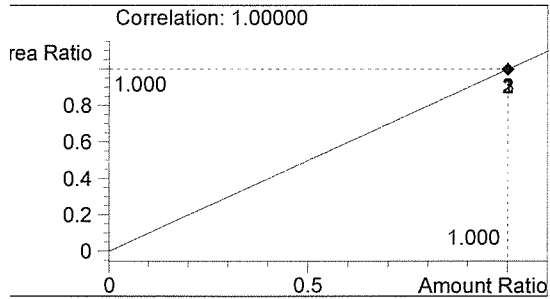


#	Compound	Area	RT
1	ETHANOL	818	1.088
2	n-PROPANOL	1875	1.854

Totals:



ETHANOL 0.099 g/100mL



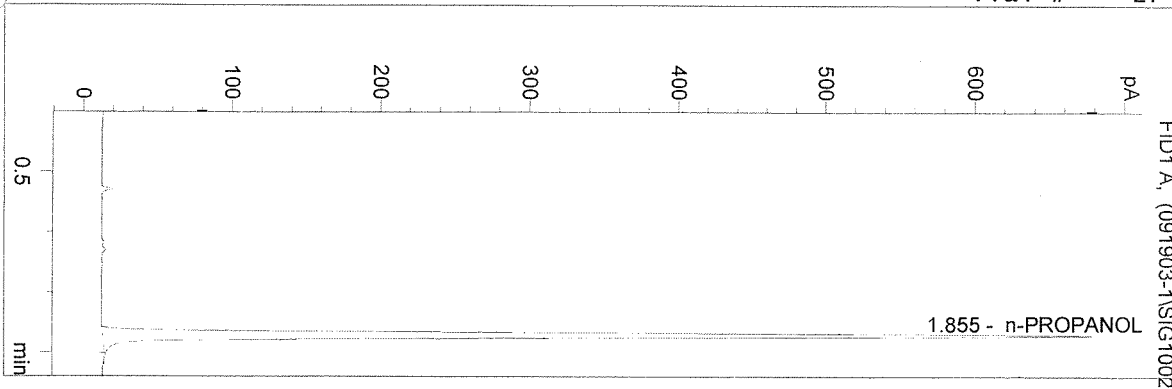
n-PROPANOL 1.000 g/100mL

WASHINGTON STATE TOXICOLOGY LABORATORY

:\HPCHEM\1\METHODS\BLDALCO3.M
 /19/03 10:45:53 AM
 Instrument 3

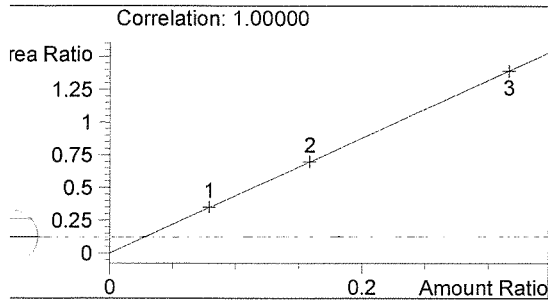
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 MARY WILSON

vial # 27

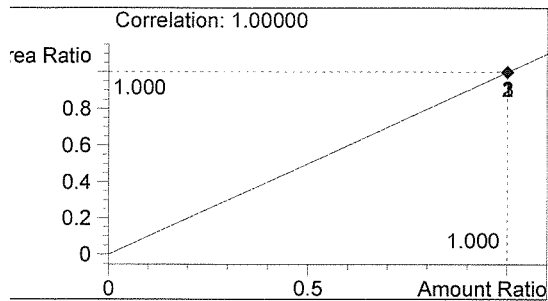


#	Compound	Area	RT
1	ETHANOL	0	0.000
2	n-PROPANOL	1909	1.855

Totals:



ETHANOL 0.000 g/100mL



n-PROPANOL 1.000 g/100mL