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

Batch number **03021** Date: 6/26/2003

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	Anal10	Anal 11	Anal 12
1	0.096	0.099	0.097									
2	0.096	0.099	0.097									
3	0.095	0.099	0.098									
4	0.096	0.099	0.097									
5	0.096	0.099	0.098									
Ctrl	0.096	0.101	0.099									

External Control:

Lot #: a022167 Exp date: 01/05

Target concentration: 0.10 g/100mL

Statistics:

Avg. solution concent.: 0.0974 g/100 mL

SD: 0.00140

Range (3xSD): 0.0932 to 0.1016

Precision CV (%): 1.4416 %

Equivalent vapor concent.: 0.0792 g/210L

Analyst	Name	Signature	Date
1	Melissa Pemberton		06/26/03
2	Edward Formoso		06/30/03
3	Mary E Wilson		07/01/03
4			
5			
6			
7			
8			
9			
10			
11			
12			

Prepared by: Melissa Pemberton according to the approved protocol

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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 03021 was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.0974 grams per 100ml.

Dated: 7/7/03
Seattle, WA

Melissa L. Pemberton
Forensic Toxicologist

MP/bf
MPQA

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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 03021, was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.0974 grams per 100ml.

Dated: 7/7/03
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.

The quality assurance solution, Lot Number 03021, was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.0974 grams per 100ml.

Dated: 7/7/03
Seattle, WA

Mary E. Wilson
Forensic Toxicologist

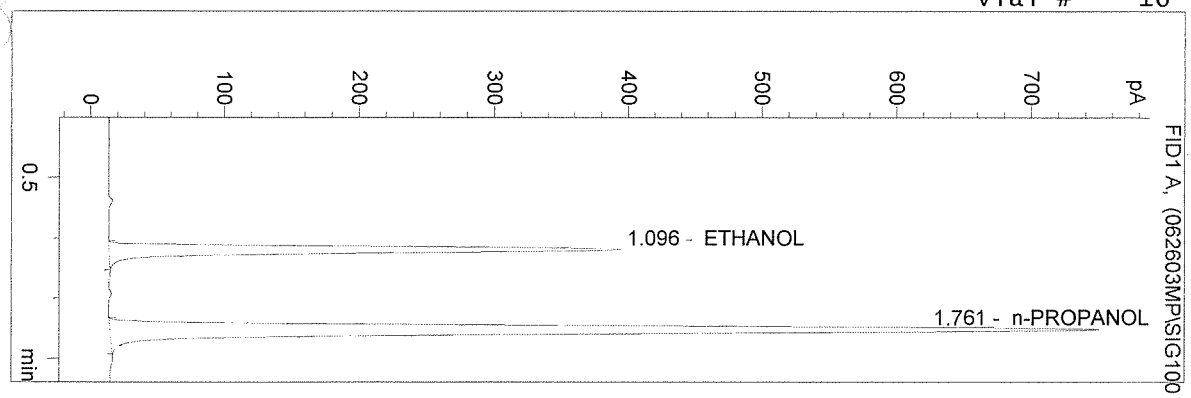
MEW/bf
MEWQA

WASHINGTON STATE TOXICOLOGY LABORATORY

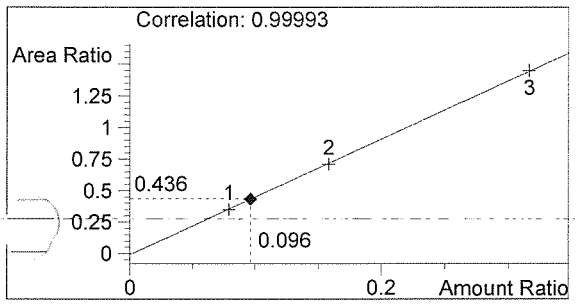
C:\HPCHEM\1\METHODS\BLDALCO3.M
6/26/03 7:59:02 AM
Instrument 3
ALC1

03021 0.08 QA
M PEMBERTON

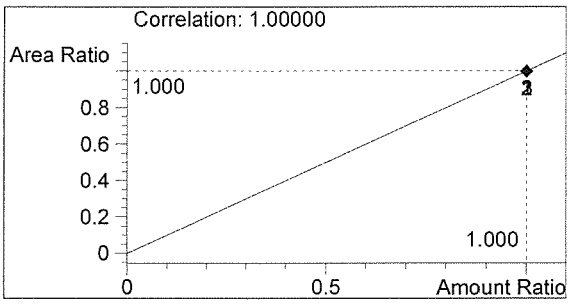
vial # 16



#	Compound	Area	RT
1	ETHANOL	1432	1.096
2	n-PROPANOL	3285	1.761
Totals:			



ETHANOL 0.096 g/100mL



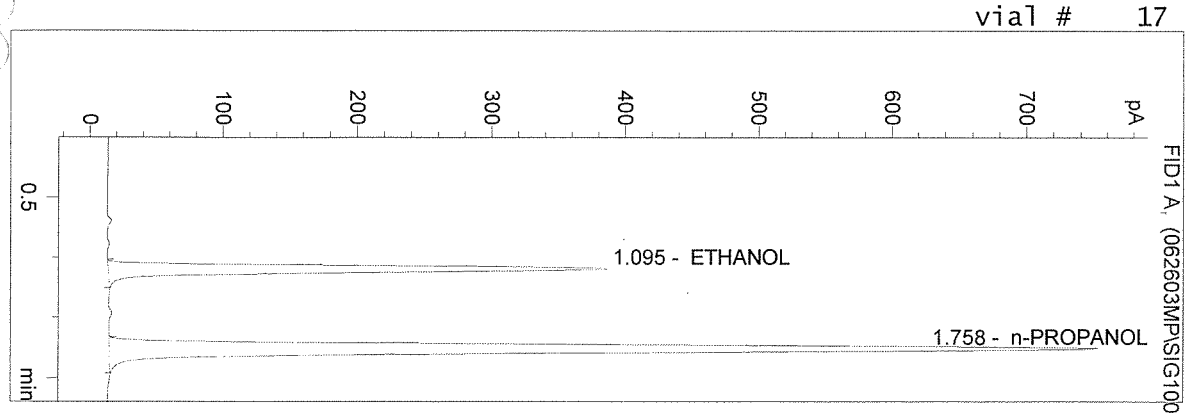
n-PROPANOL 1.000 g/100mL

WASHINGTON STATE TOXICOLOGY LABORATORY

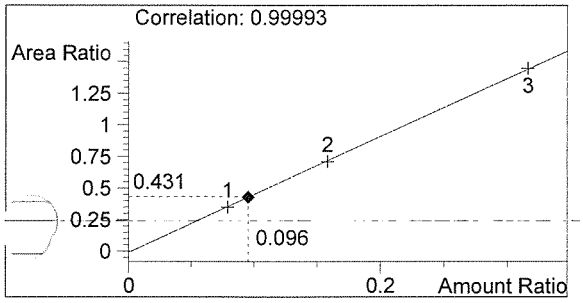
C:\HPCHEM\1\METHODS\BLDALCO3.M
6/26/03 8:02:21 AM
Instrument 3
ALC1

03021 0.08QA
M PEMBERTON

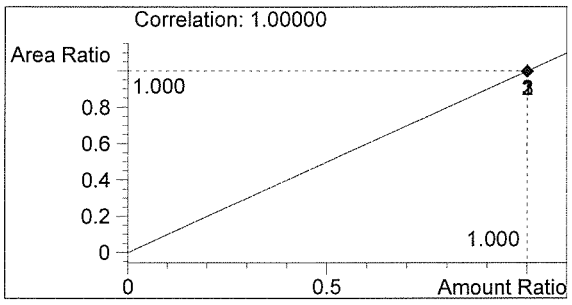
vial # 17



#	Compound	Area	RT
1	ETHANOL	1440	1.095
2	n-PROPANOL	3338	1.758
Totals:			



ETHANOL 0.096 g/100mL



n-PROPANOL 1.000 g/100mL

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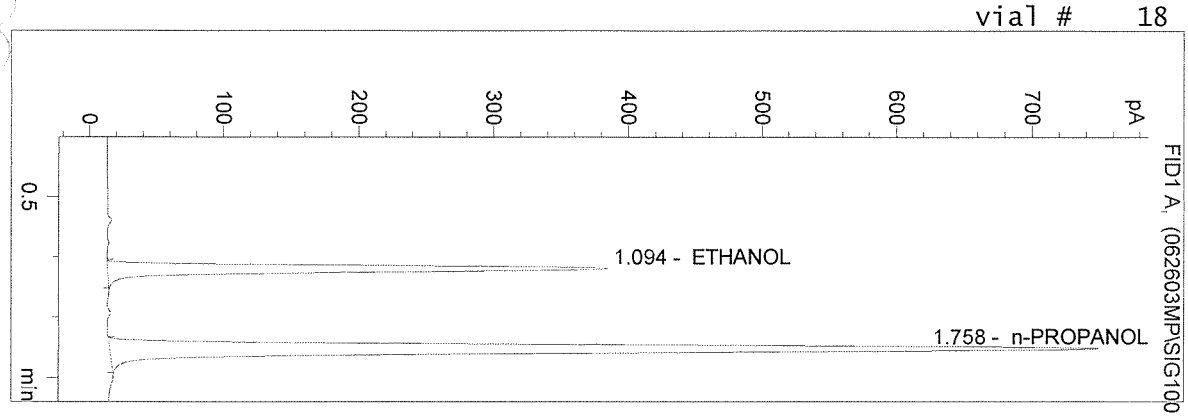
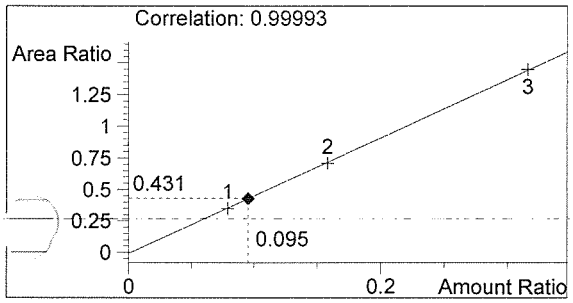
C:\HPCHEM\1\METHODS\BLDALCO3.M
6/26/03 8:05:15 AM
Instrument 3
ALC1

03021 0.08QA
M PEMBERTON

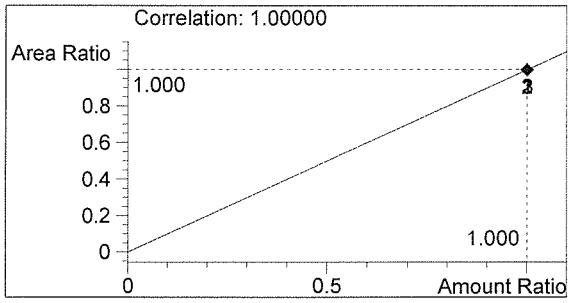
vial # 18



#	Compound	Area	RT
1	ETHANOL	1420	1.094
2	n-PROPANOL	3297	1.758
Totals:			



ETHANOL 0.095 g/100mL



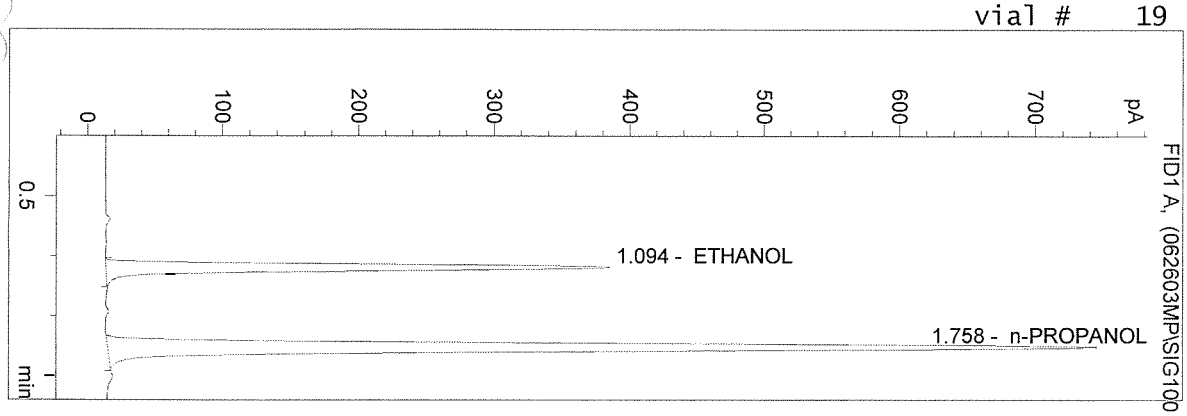
n-PROPANOL 1.000 g/100mL

WASHINGTON STATE TOXICOLOGY LABORATORY

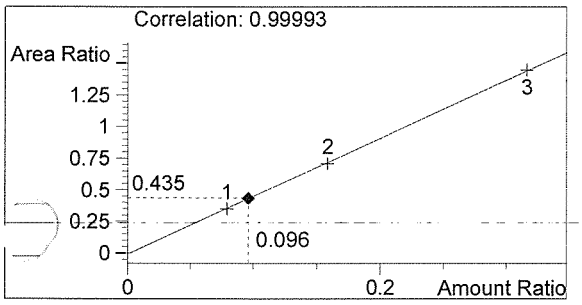
C:\HPCHEM\1\METHODS\BLDALCO3.M
6/26/03 8:08:01 AM
Instrument 3
ALC1

03021 0.08QA
M PEMBERTON

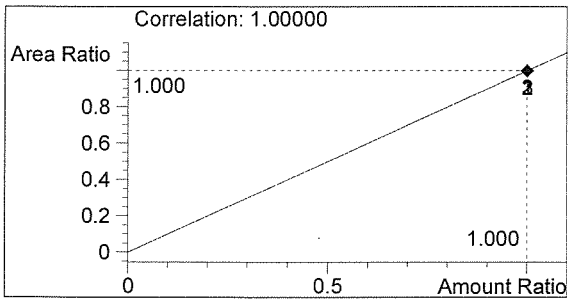
vial # 19



#	Compound	Area	RT
1	ETHANOL	1425	1.094
2	n-PROPANOL	3276	1.758
Totals:			



ETHANOL 0.096 g/100mL



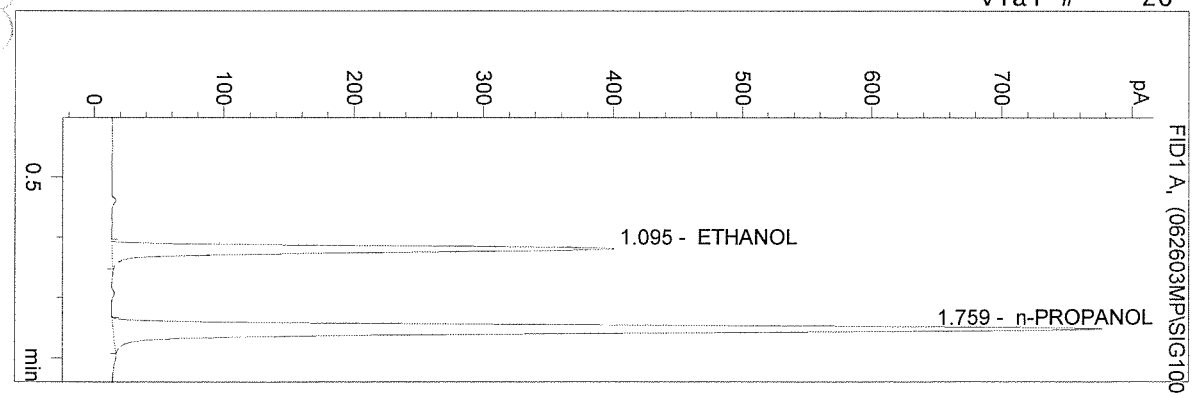
n-PROPANOL 1.000 g/100mL

WASHINGTON STATE TOXICOLOGY LABORATORY

C:\HPCHEM\1\METHODS\BLDALCO3.M
6/26/03 8:10:46 AM
Instrument 3
ALC1

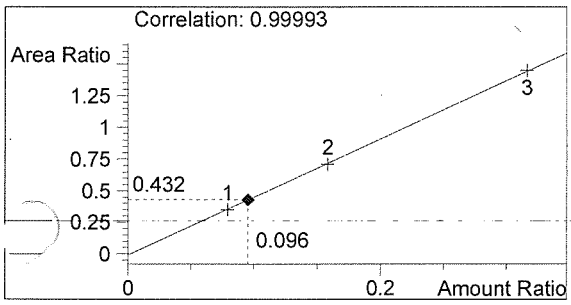
03021 0.08QA
M PEMBERTON

vial # 20

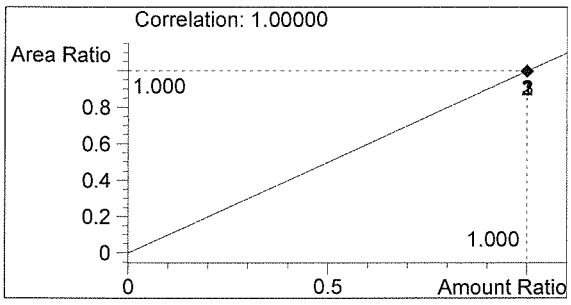


#	Compound	Area	RT
1	ETHANOL	1486	1.095
2	n-PROPANOL	3445	1.759

Totals:



ETHANOL 0.096 g/100mL



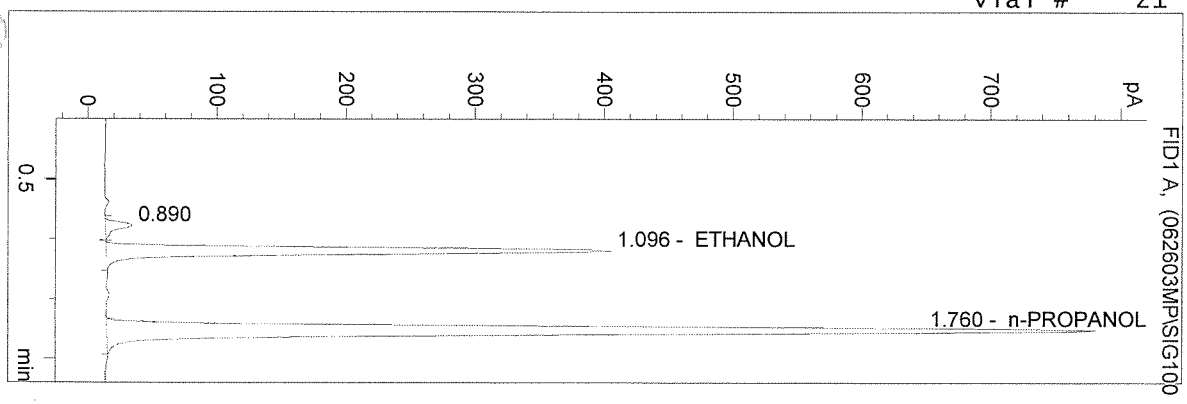
n-PROPANOL 1.000 g/100mL

WASHINGTON STATE TOXICOLOGY LABORATORY

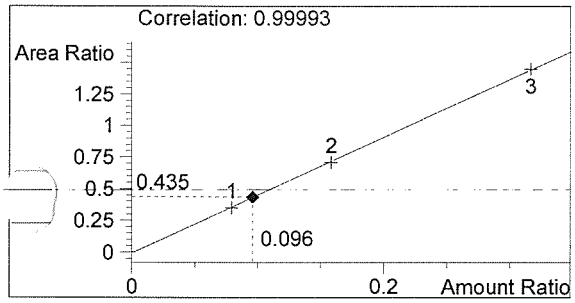
C:\HPCHEM\1\METHODS\BLDALCO3.M
6/26/03 8:14:01 AM
Instrument 3
ALC1

0.10 CONTROL
M PEMBERTON

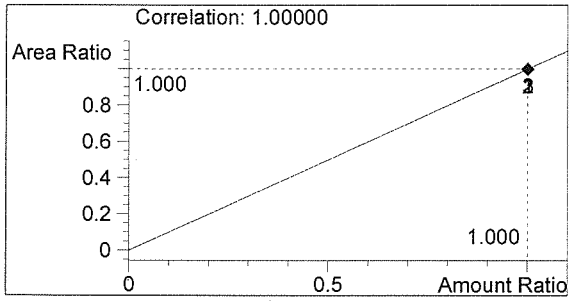
vial # 21



#	Compound	Area	RT
1		86	0.890
2	ETHANOL	1501	1.096
3	n-PROPANOL	3449	1.760
Totals:			



ETHANOL 0.096 g/100mL

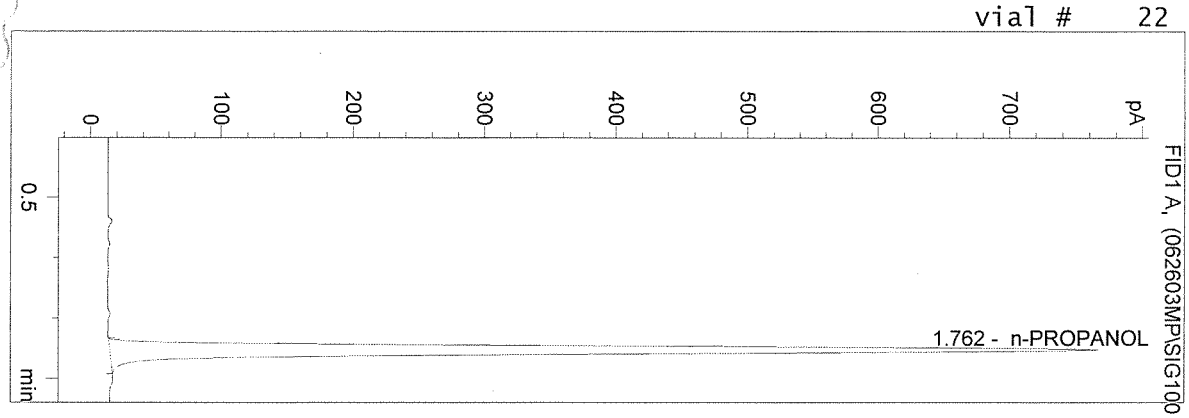


n-PROPANOL 1.000 g/100mL

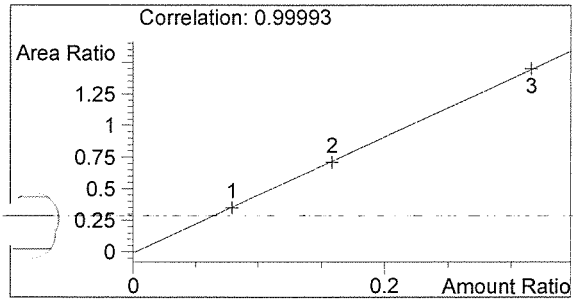
WASHINGTON STATE TOXICOLOGY LABORATORY

C:\HPCHEM\1\METHODS\BLDALCO3.M
6/26/03 8:16:47 AM BLK
Instrument 3 M PEMBERTON
ALC1

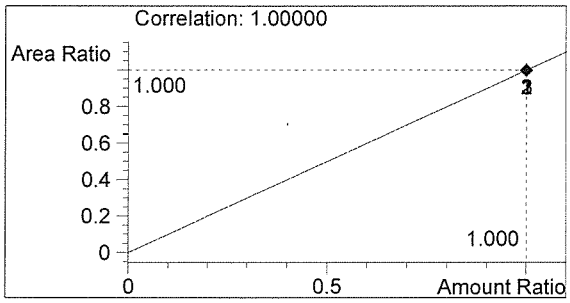
vial # 22



#	Compound	Area	RT
1	ETHANOL	0	0.000
2	n-PROPANOL	3345	1.762
Totals:			



ETHANOL 0.000 g/100mL

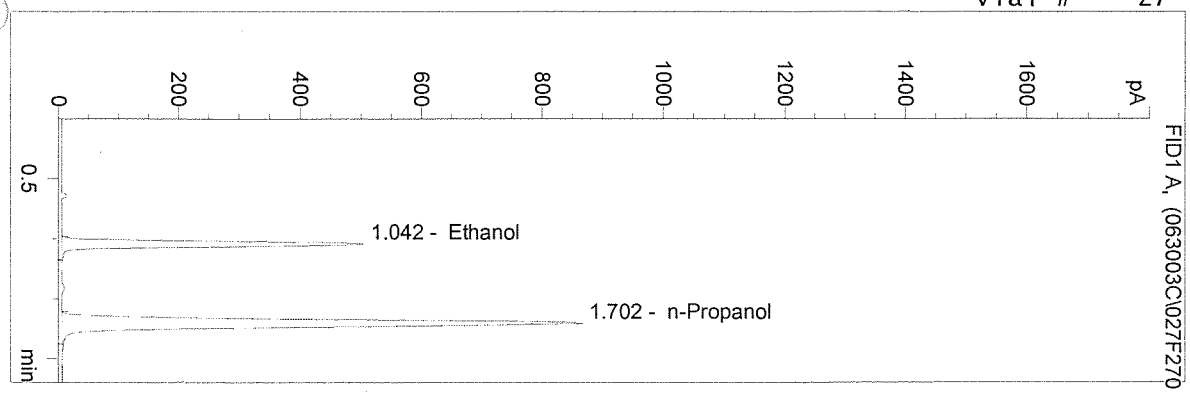


n-PROPANOL 1.000 g/100mL

WASHINGTON STATE TOXICOLOGY LABORATORY

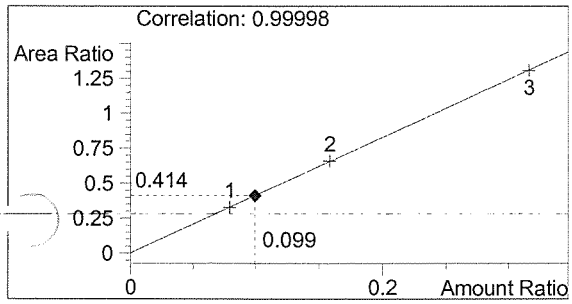
C:\HPCHEM\1\METHODS\BLDALCO.M
6/30/03 11:16:06 AM 03021
Instrument 1 ED FORMOSO
ALC1

vial # 27

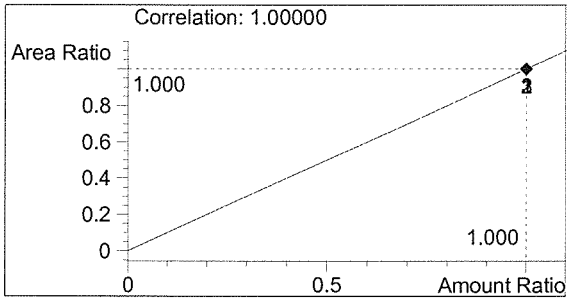


#	Compound	Area	RT
1	Ethanol	1497	1.042
2	n-Propanol	3617	1.702

Totals:



Ethanol 0.099 g/100ml



n-Propanol 1.000 g/100ml

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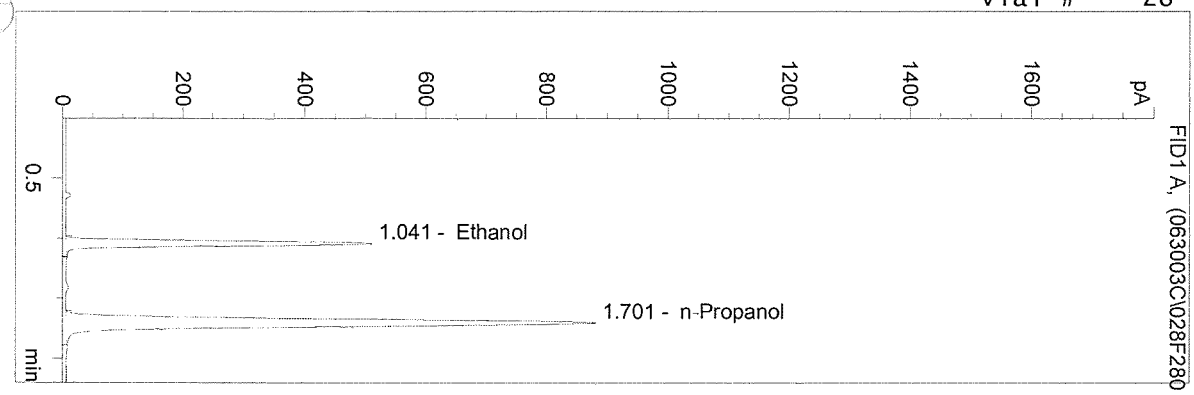
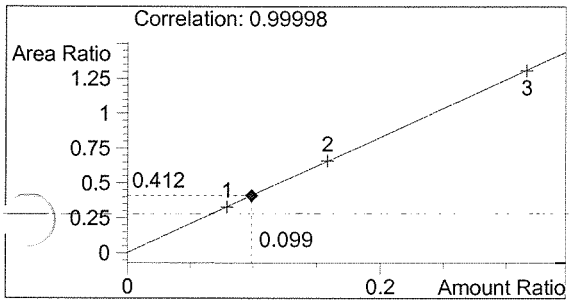
C:\HPCHEM\1\METHODS\BLDALCO.M
6/30/03 11:19:07 AM 03021
Instrument 1 ED FORMOSO
ALC1

vial # 28

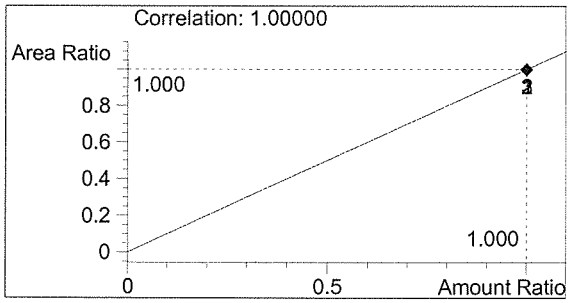


#	Compound	Area	RT
1	Ethanol	1515	1.041
2	n-Propanol	3681	1.701

Totals:



Ethanol 0.099 g/100ml

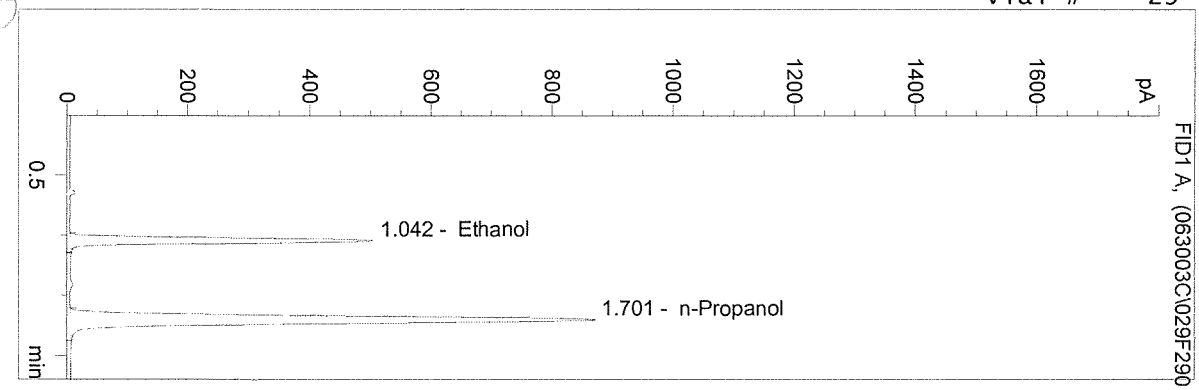


n-Propanol 1.000 g/100ml

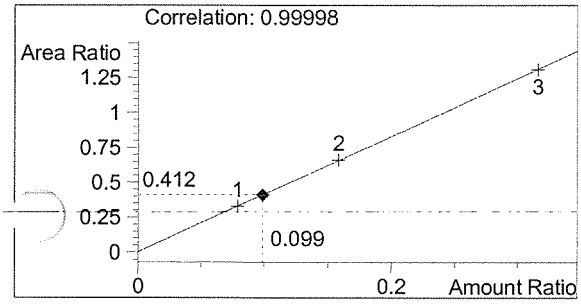
WASHINGTON STATE TOXICOLOGY LABORATORY

C:\HPCHEM\1\METHODS\BLDALCO.M
6/30/03 11:22:20 AM 03021
Instrument 1 ED FORMOSO
ALC1

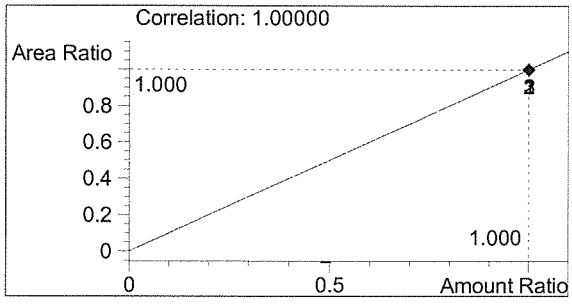
vial # 29



#	Compound	Area	RT
1	Ethanol	1501	1.042
2	n-Propanol	3645	1.701
Totals:			



Ethanol 0.099 g/100ml

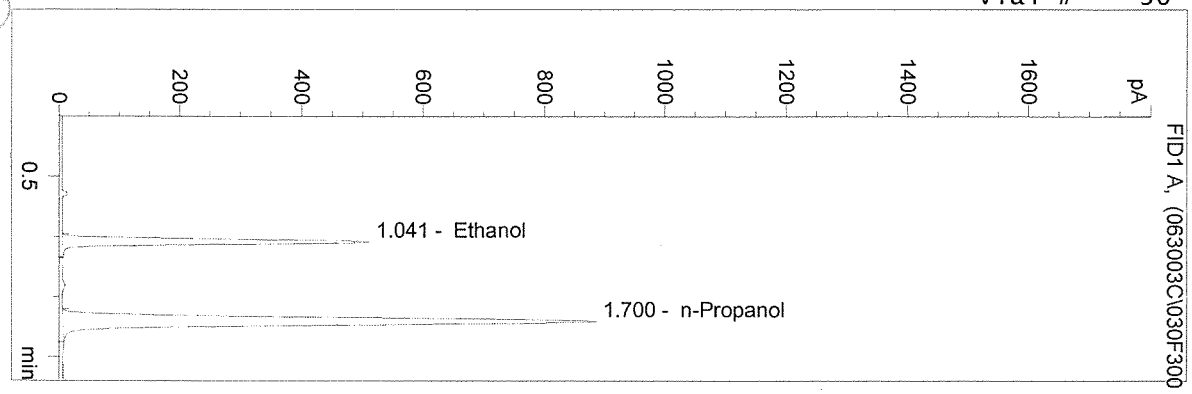


n-Propanol 1.000 g/100ml

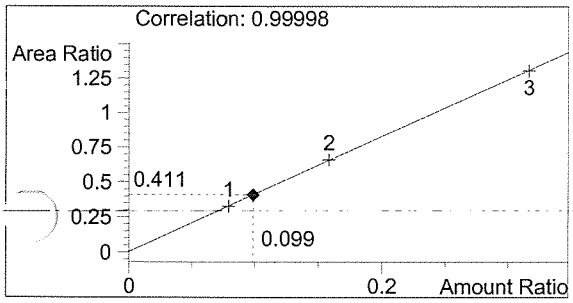
WASHINGTON STATE TOXICOLOGY LABORATORY

C:\HPCHEM\1\METHODS\BLDALCO.M
6/30/03 11:25:23 AM 03021
Instrument 1 ED FORMOSO
ALC1

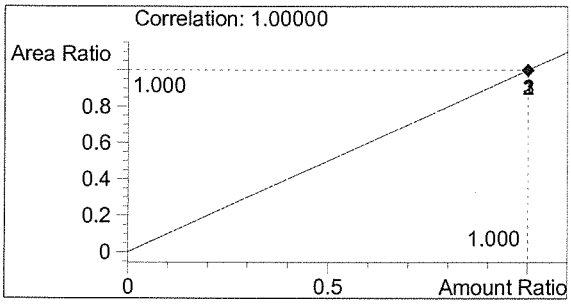
vial # 30



#	Compound	Area	RT
1	Ethanol	1524	1.041
2	n-Propanol	3708	1.700
Totals:			



Ethanol 0.099 g/100ml

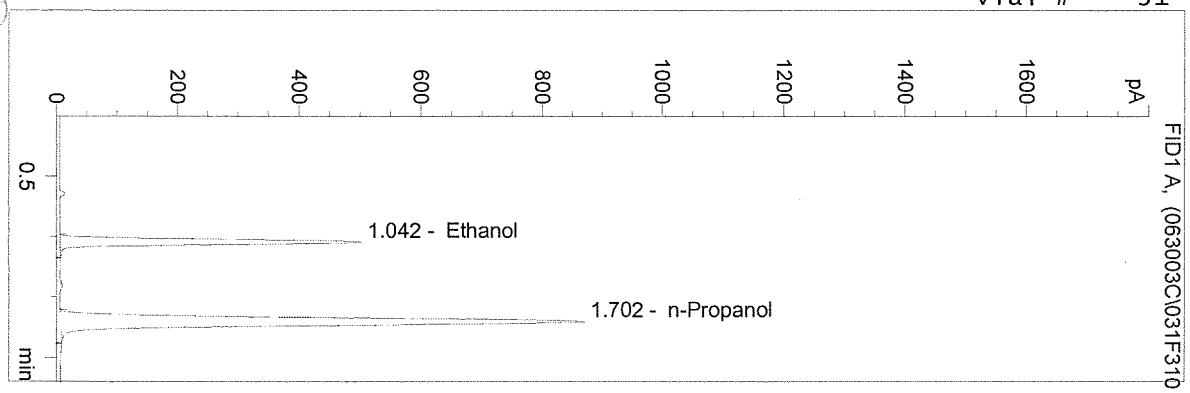


n-Propanol 1.000 g/100ml

WASHINGTON STATE TOXICOLOGY LABORATORY

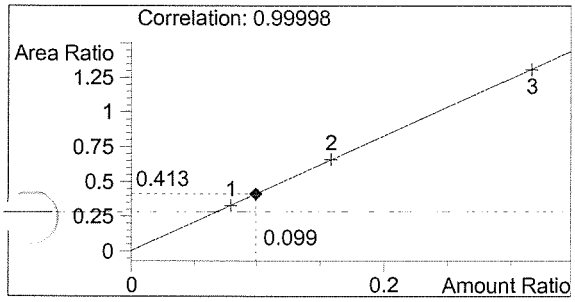
C:\HPCHEM\1\METHODS\BLDALCO.M
6/30/03 11:28:25 AM 03021
Instrument 1 ED FORMOSO
ALC1

vial # 31

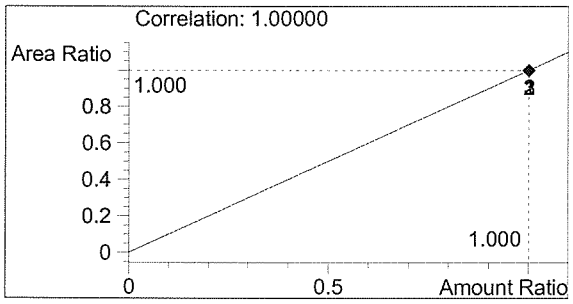


#	Compound	Area	RT
1	Ethanol	1508	1.042
2	n-Propanol	3649	1.702

Totals:



Ethanol 0.099 g/100ml



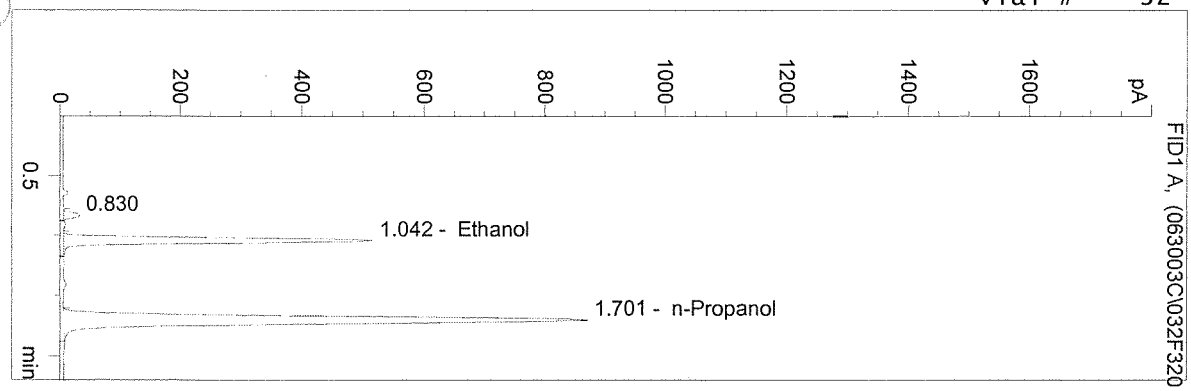
n-Propanol 1.000 g/100ml

WASHINGTON STATE TOXICOLOGY LABORATORY

C:\HPCHEM\1\METHODS\BLDALCO.M
6/30/03 11:31:27 AM
Instrument 1
ALC1

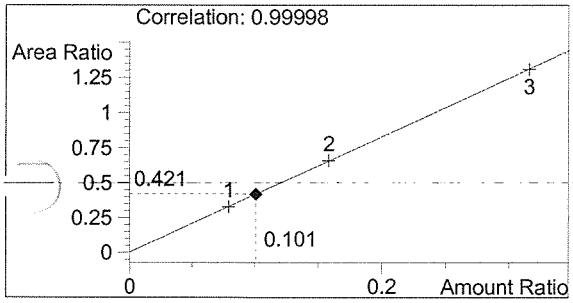
0.10 CONTROL
ED FORMOSO

vial # 32

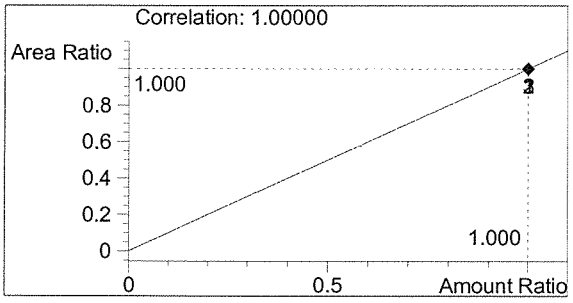


#	Compound	Area	RT
1		80	0.830
2	Ethanol	1525	1.042
3	n-Propanol	3626	1.701

Totals:



Ethanol 0.101 g/100ml



n-Propanol 1.000 g/100ml

WASHINGTON STATE TOXICOLOGY LABORATORY

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6/30/03 11:34:37 AM
Instrument 1
ALC1

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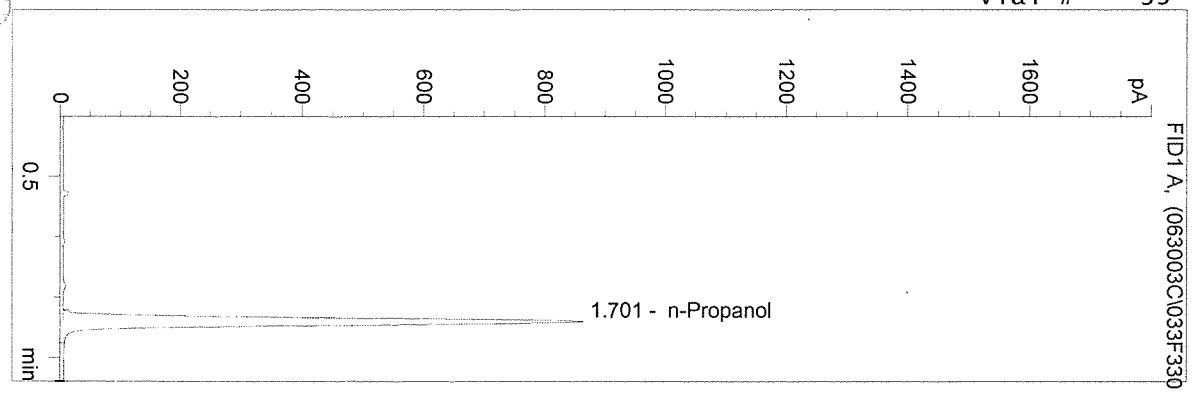
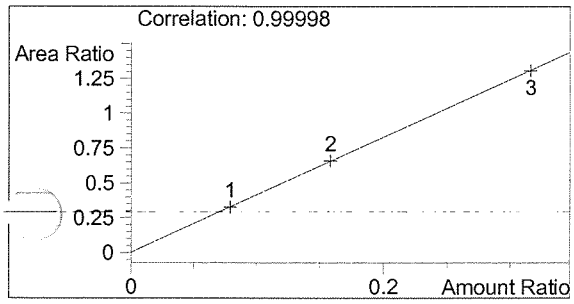
ED FORMOSO

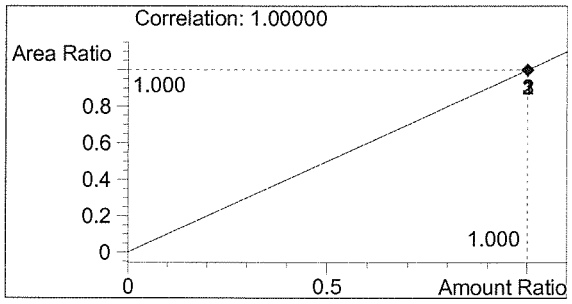
vial # 33



#	Compound	Area	RT
1	Ethanol	0	0.000
2	n-Propanol	3618	1.701
Totals:			



Ethanol 0.000 g/100ml



n-Propanol 1.000 g/100ml

WASHINGTON STATE TOXICOLOGY LABORATORY

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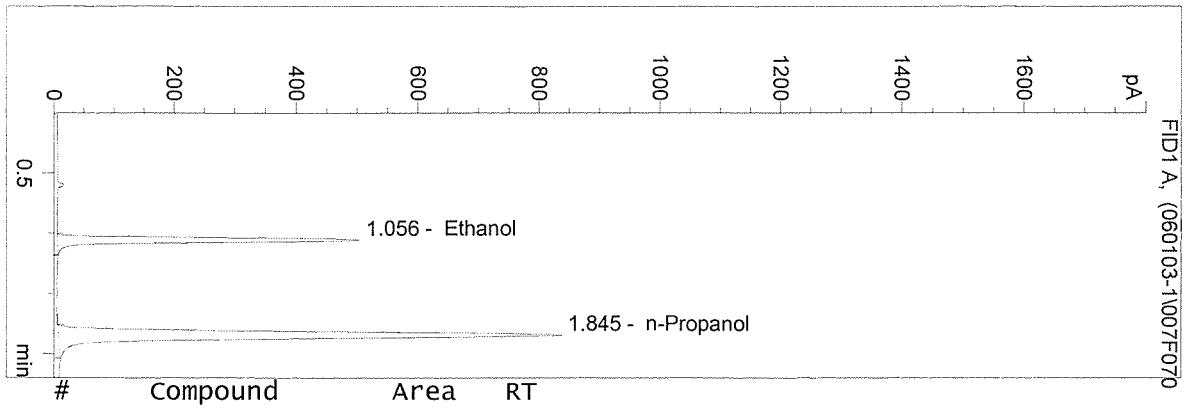
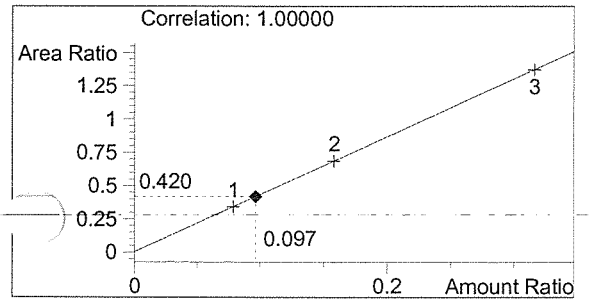
7/1/03 9:40:20 AM
Instrument 2
ALC1

03021
MARY WILSON

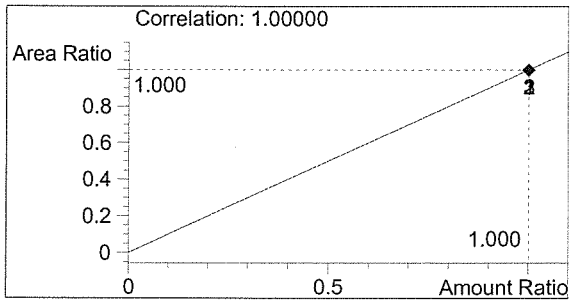
vial # 7



#	Compound	Area	RT
1	Ethanol	1356	1.056
2	n-Propanol	3227	1.845
Totals:			



Ethanol 0.097 g/100ml



n-Propanol 1.000 g/100ml

Cal # 034052

WASHINGTON STATE TOXICOLOGY LABORATORY

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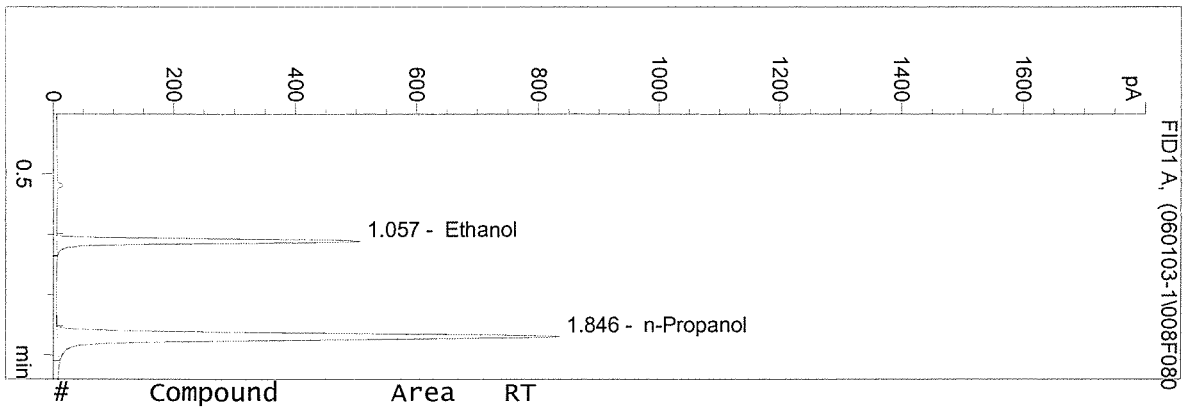
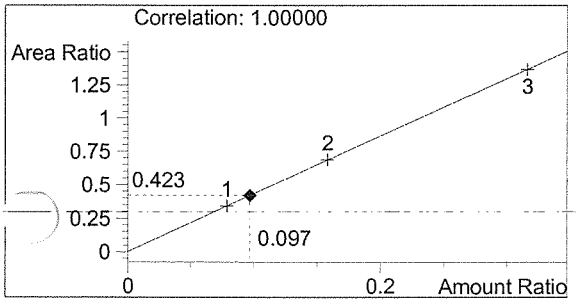
7/1/03 9:43:22 AM
Instrument 2
ALC1

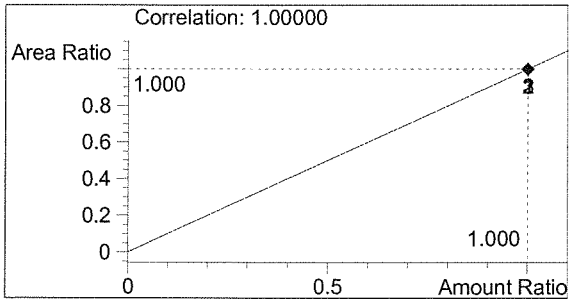
03021
MARY WILSON
vial # 8



#	Compound	Area	RT
1	Ethanol	1360	1.057
2	n-Propanol	3217	1.846
Totals:			



Ethanol 0.097 g/100ml



n-Propanol 1.000 g/100ml

WASHINGTON STATE TOXICOLOGY LABORATORY

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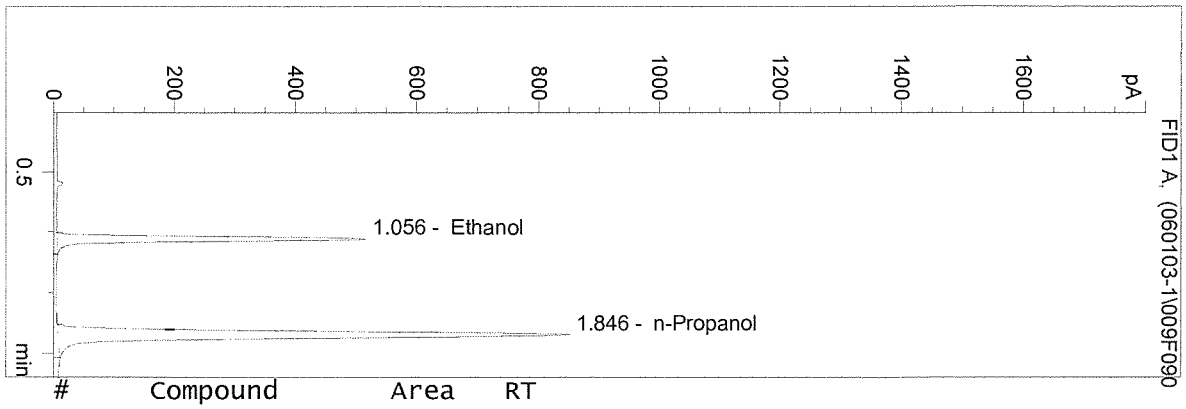
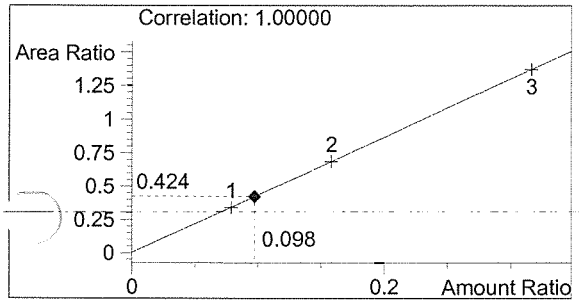
7/1/03 9:46:36 AM
Instrument 2
ALC1

03021
MARY WILSON

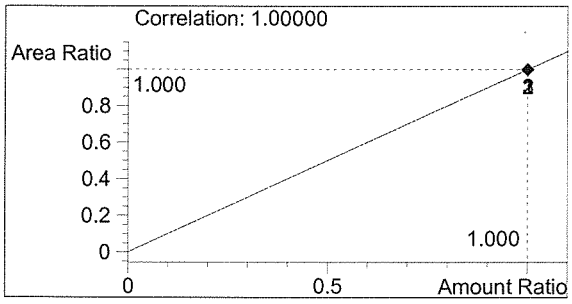
vial # 9



#	Compound	Area	RT
1	Ethanol	1389	1.056
2	n-Propanol	3277	1.846
Totals:			



Ethanol 0.098 g/100ml



n-Propanol 1.000 g/100ml

WASHINGTON STATE TOXICOLOGY LABORATORY

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Instrument 2
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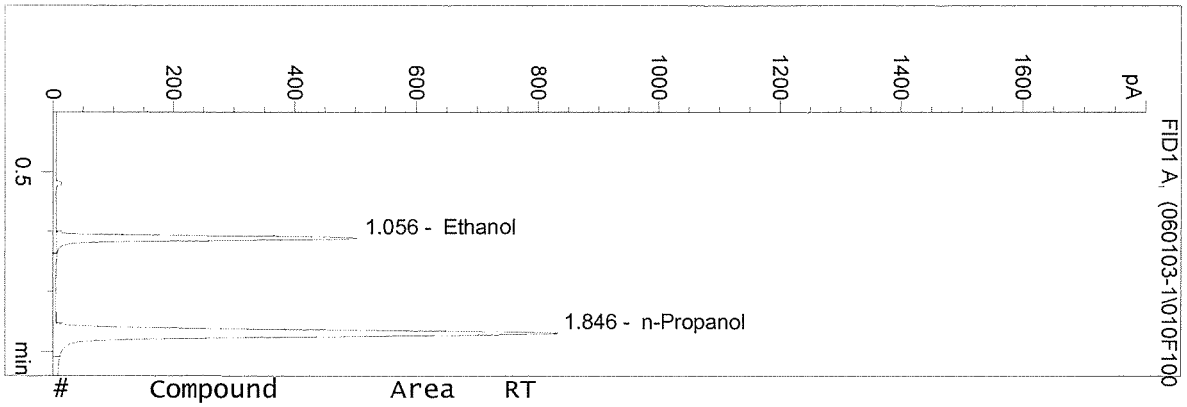
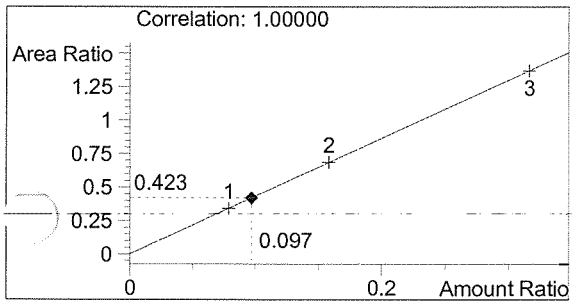
03021
MARY WILSON

vial # 10

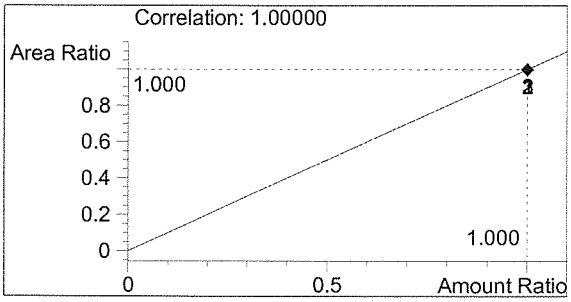


#	Compound	Area	RT
1	Ethanol	1355	1.056
2	n-Propanol	3203	1.846

Totals:



Ethanol 0.097 g/100ml



n-Propanol 1.000 g/100ml

WASHINGTON STATE TOXICOLOGY LABORATORY

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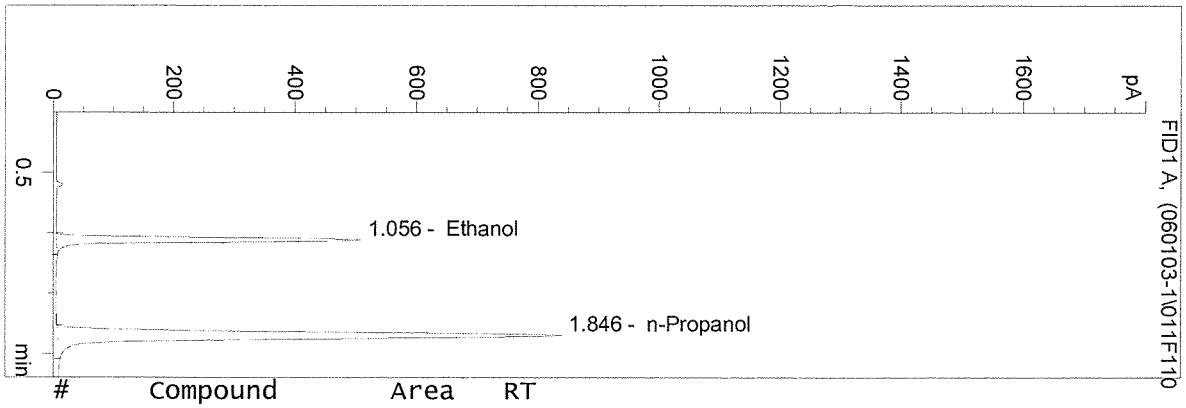
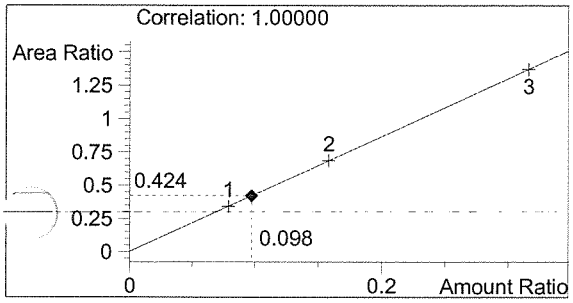
7/1/03 9:52:40 AM
Instrument 2
ALC1

03021
MARY WILSON

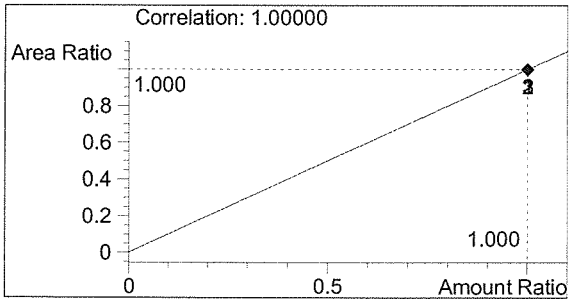
vial # 11



#	Compound	Area	RT
1	Ethanol	1369	1.056
2	n-Propanol	3229	1.846
Totals:			



Ethanol 0.098 g/100ml



n-Propanol 1.000 g/100ml

WASHINGTON STATE TOXICOLOGY LABORATORY

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7/1/03 9:55:42 AM
Instrument 2
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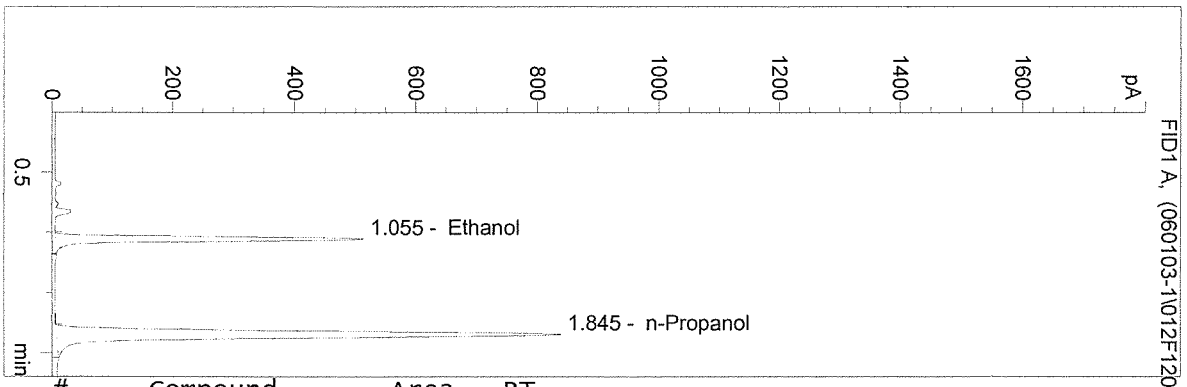
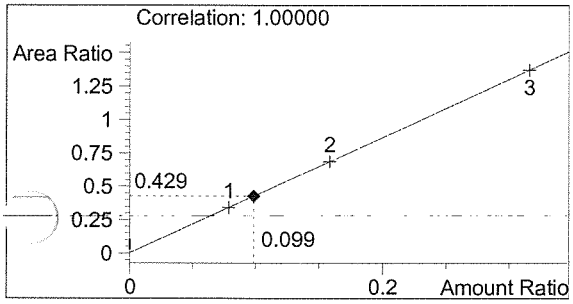
MARY WILSON

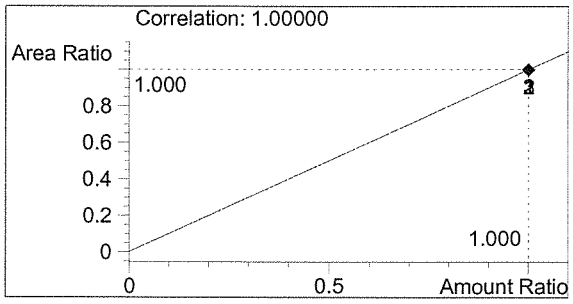
vial # 12



#	Compound	Area	RT
1	Ethanol	1389	1.055
2	n-Propanol	3240	1.845
Totals:			



Ethanol 0.099 g/100ml



n-Propanol 1.000 g/100ml

WASHINGTON STATE TOXICOLOGY LABORATORY

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7/1/03 9:58:56 AM
Instrument 2
ALC1

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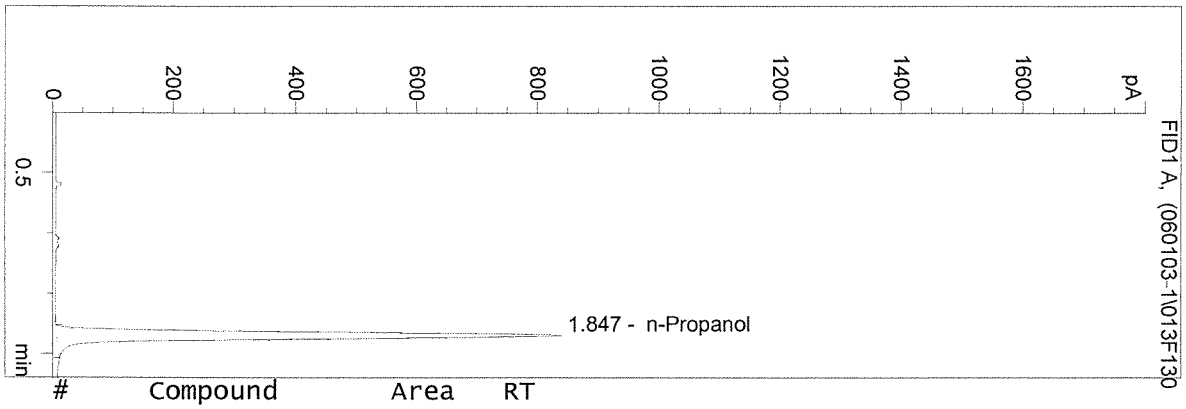
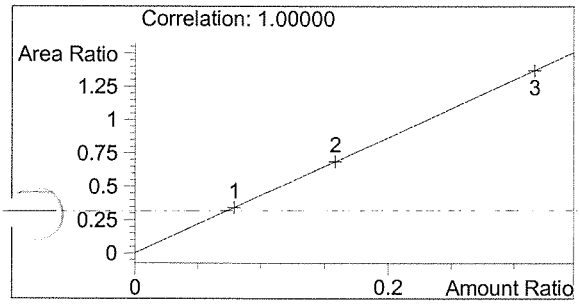
MARY WILSON

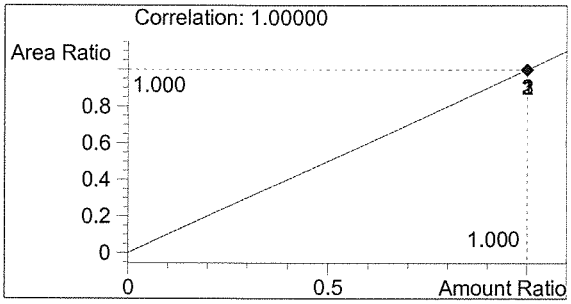
vial # 13



#	Compound	Area	RT
1	Ethanol	0	0.000
2	n-Propanol	3228	1.847
Totals:			



Ethanol 0.000 g/100ml



n-Propanol 1.000 g/100ml