VERMONT FORENSIC LABORATORY

PO BOX 47
WATERBURY, VERMONT 05676-0047
TEL: 802-244-8788
FAX: 802-241-5557
http://vfl.vermont.gov

Certificate of Analysis of DataMaster External Standard Solution

On 10/25/2013, an ethanol solution was prepared by Rebecca Mead for use as a DataMaster External Standard solution. The solution was prepared per standard laboratory practice and assigned the lot number 13-19-100 and an expiration date of 10/25/2014.

On 10/28/2013 and 10/31/2013, the solution was analyzed against calibration VFL10282013 and VFL10312013. Analysis of the solution was performed using headspace gas chromatography. The instrument was calibrated prior to analyses. It was found to have met required quality assurance performance specifications and was operating properly. Quality checks throughout the analytical process demonstrated that the instrument continued to operate properly.

This solution is certified as presenting 0.099 g/210L simulated breath ethanol concentration and approved for use as a DataMaster External Standard solution.

Dated at Waterbury, Vermont on Friday, November 01, 2013.

Amanda Bolduc

0.10 External Standard Solution 20L
Lot # 13-19-100
Prepared 10/25/2013 by RLM
Exp 10/25/2014

ALB CAL VFL10282013
RLM/ALB Vials
Analyzed on 10/28/2013

0.0988 ALB
0.0990
0.0996
0.1019
0.0994
0.1018
0.1000
0.0996 RLM
0.0975
0.0988
0.0973
0.0999
0.0961
0.0992

Ave. = 0.0992
Std Dev. = 0.0016
Range = 0.0961 - 0.1019

ALB CAL VFL10312013
RLM/ALB Vials
Analyzed on 10/31/13 @ 11/5/13

0.0988 alb
0.1029
0.0992
0.1016
0.0983
0.1004
0.0975
0.0995 rlm
0.0970
0.1001
0.0967
0.0991
0.0973
0.0993

Ave. = 0.0991
Std Dev. = 0.0018
Range = 0.0967 - 0.1029

0.099
ALB 11/1/13

Total Values from Both Runs

Average	Mean
0.0961	0.0961
0.0967	0.0967
0.0970	0.0970
0.0973	0.0973
0.0973	
0.0975	0.0975
0.0975	
0.0983	0.0983
0.0988	0.0988
0.0988	
0.0988	
0.0990	0.0990
0.0991	0.0991
0.0992	0.0992
0.0992	
0.0993	0.0993
0.0994	0.0994
0.0995	0.0995
0.0996	0.0996
0.0996	
0.0999	0.0999
0.1000	0.1000
0.1001	0.1001
0.1004	0.1004
0.1016	0.1016
0.1018	0.1018
0.1019	0.1019
0.1029	0.1029

Ave. =	0.0992
Avg Std Dev. =	0.0016
Mean =	0.0993
Mean Std Dev. =	0.0018
Range =	0.0961 - 0.1029
RPD =	6.85%

11/4/2013

Headspace Alcohol Analysis Standards Coversheet

Analyst: AeB Date: 10/28/13

11/4/2013

Calibration Standards:

Lot ID: ES-09262013 Preparation Date: 09/26/2013 Expiration Date: 12/26/2013

	Standard A	Standard B	Standard C	Standard D	Standard E	Calibration Check
% Ethanol (w/v)	0.006	0.025	0.082	0.201	0.411	0.082
Acceptance Range (± 10%)	0.007	0.028	0.090	0.221	0.452	0.090
	0.005	0.023	0.074	0.181	0.370	0.074

Control Sample:

Sample	Source	Lot number	Target Value	Acceptance Range	
Aqueous	Cerilliant	FN021111-03	0.080	0.072	0.088

Calibration and Control Sample Data:

Vial No.	Sample Identification		Result	In Range?	Comments
1	Blank		<0.005	Ⓝ N	
2	Compound Retention Times:			N/A	
		Acetaldehyde	1.92		
		Methanol	2.01		
		Ethanol	2.65		
		Acetone	3.06		
		Isopropanol	3.19		
		T- butanol	3.63		
		n-propanol	4.43		
3	Standard A		0.006	Ⓨ N	
4	Standard B		0.024	Ⓨ N	
5	Standard C		0.081	Ⓨ N	
6	Standard D		0.198	Ⓨ N	
7	Standard E		0.413	Ⓨ N	
8	Aqueous QC	10/28/13	~~0.0897~~	Ⓨ N	
9	Aqueous QC		0.0802	Ⓨ N	$\bar{x}$ = 0.080 100%

AeB

File Name = C:\Alcohol Data\VFL10282013\VFL10282013.SEQ
Version = 1
File Date = 10/28/2013 10:21:14 AM

Entry #	Raw File Name	Method File Name	Sample Name	Sample Wt.	Int. Std. Amount
1	VFL10282013.0001.raw	Blood Alc temp VFL.MET	Blank	1.00	1.00
2	VFL10282013.0002.raw	Blood Alc temp VFL.MET	TMX	1.00	1.00
3	VFL10282013.0003.raw	Blood Alc temp VFL.MET	STD A	1.00	1.00
4	VFL10282013.0004.raw	Blood Alc temp VFL.MET	STD B	1.00	1.00
5	VFL10282013.0005.raw	Blood Alc temp VFL.MET	STD C	1.00	1.00
6	VFL10282013.0006.raw	Blood Alc temp VFL.MET	STD D	1.00	1.00
7	VFL10282013.0007.raw	Blood Alc temp VFL.MET	STD E	1.00	1.00
8	VFL10282013.0008.raw	Blood Alc temp VFL.MET	AQ QC	1.00	1.00
9	VFL10282013.0009.raw	Blood Alc temp VFL.MET	AQ QC	1.00	1.00
10	VFL10282013.0010.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
11	VFL10282013.0011.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
12	VFL10282013.0012.raw	simsoln.met	0.08 ALB	1.00	1.00
13	VFL10282013.0013.raw	simsoln.met	0.08 ALB	1.00	1.00
14	VFL10282013.0014.raw	simsoln.met	0.08 ALB	1.00	1.00
15	VFL10282013.0015.raw	simsoln.met	0.08 ALB	1.00	1.00
16	VFL10282013.0016.raw	simsoln.met	0.08 ALB	1.00	1.00
17	VFL10282013.0017.raw	simsoln.met	0.08 ALB	1.00	1.00
18	VFL10282013.0018.raw	simsoln.met	0.08 ALB	1.00	1.00
19	VFL10282013.0019.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
20	VFL10282013.0020.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
21	VFL10282013.0021.raw	simsoln.met	0.08 RLM	1.00	1.00
22	VFL10282013.0022.raw	simsoln.met	0.08 RLM	1.00	1.00
23	VFL10282013.0023.raw	simsoln.met	0.08 RLM	1.00	1.00
24	VFL10282013.0024.raw	simsoln.met	0.08 RLM	1.00	1.00
25	VFL10282013.0025.raw	simsoln.met	0.08 RLM	1.00	1.00
26	VFL10282013.0026.raw	simsoln.met	0.08 RLM	1.00	1.00
27	VFL10282013.0027.raw	simsoln.met	0.08 RLM	1.00	1.00
28	VFL10282013.0028.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
29	VFL10282013.0029.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
30	VFL10282013.0030.raw	simsoln.met	0.10 ALB	1.00	1.00
31	VFL10282013.0031.raw	simsoln.met	0.10 ALB	1.00	1.00
32	VFL10282013.0032.raw	simsoln.met	0.10 ALB	1.00	1.00
33	VFL10282013.0033.raw	simsoln.met	0.10 ALB	1.00	1.00
34	VFL10282013.0034.raw	simsoln.met	0.10 ALB	1.00	1.00
35	VFL10282013.0035.raw	simsoln.met	0.10 ALB	1.00	1.00
36	VFL10282013.0036.raw	simsoln.met	0.10 ALB	1.00	1.00
37	VFL10282013.0037.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
38	VFL10282013.0038.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
39	VFL10282013.0039.raw	simsoln.met	0.10 RLM	1.00	1.00
40	VFL10282013.0040.raw	simsoln.met	0.10 RLM	1.00	1.00
41	VFL10282013.0041.raw	simsoln.met	0.10 RLM	1.00	1.00
42	VFL10282013.0042.raw	simsoln.met	0.10 RLM	1.00	1.00
43	VFL10282013.0043.raw	simsoln.met	0.10 RLM	1.00	1.00
44	VFL10282013.0044.raw	simsoln.met	0.10 RLM	1.00	1.00
45	VFL10282013.0045.raw	simsoln.met	0.10 RLM	1.00	1.00
46	VFL10282013.0046.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
47	VFL10282013.0047.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
48	VFL10282013.0048.raw	simsoln.met	0.40 ALB	1.00	1.00
49	VFL10282013.0049.raw	simsoln.met	0.40 ALB	1.00	1.00
50	VFL10282013.0050.raw	simsoln.met	0.40 ALB	1.00	1.00
51	VFL10282013.0051.raw	simsoln.met	0.40 ALB	1.00	1.00
52	VFL10282013.0052.raw	simsoln.met	0.40 ALB	1.00	1.00
53	VFL10282013.0053.raw	simsoln.met	0.40 ALB	1.00	1.00
54	VFL10282013.0054.raw	simsoln.met	0.40 ALB	1.00	1.00
55	VFL10282013.0055.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
56	VFL10282013.0056.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
57	VFL10282013.0057.raw	simsoln.met	0.40 RLM	1.00	1.00
58	VFL10282013.0058.raw	simsoln.met	0.40 RLM	1.00	1.00
59	VFL10282013.0059.raw	simsoln.met	0.40 RLM	1.00	1.00
60	VFL10282013.0060.raw	simsoln.met	0.40 RLM	1.00	1.00
61	VFL10282013.0061.raw	simsoln.met	0.40 RLM	1.00	1.00
62	VFL10282013.0062.raw	simsoln.met	0.40 RLM	1.00	1.00

Entry #	Raw File Name	Method File Name	Sample Name	Sample Wt.	Int. Std. Amount
63	VFL10282013.0063.raw	simsoln.met	0.40 RLM	1.00	1.00
64	VFL10282013.0064.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
65	VFL10282013.0065.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00

File Name: C:\Methods\VFL10282013.CAL
Version: 7

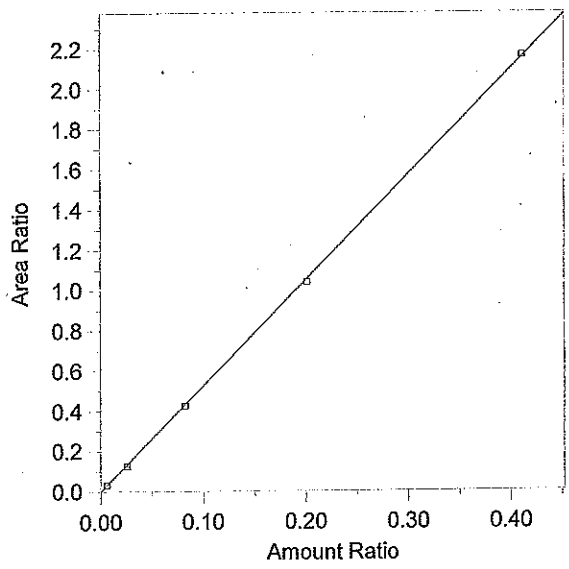
Creator:
Description:
Reason for change:

Internal standard calibration
No injection volume correction
No sample weight correction
Area reject threshold: 1500
Reference peak area reject threshold: 0
Amount units:
No default component

Method of calculating data point averages: Equal weight for all updates
No calibration update report

All levels are normal data points.

3 Ethanol



Expected retention time: 2.655 minutes
Search window: 0.1 minutes
Internal standard component: 7 (n-Propanol)
No retention time reference component
Group number: 0

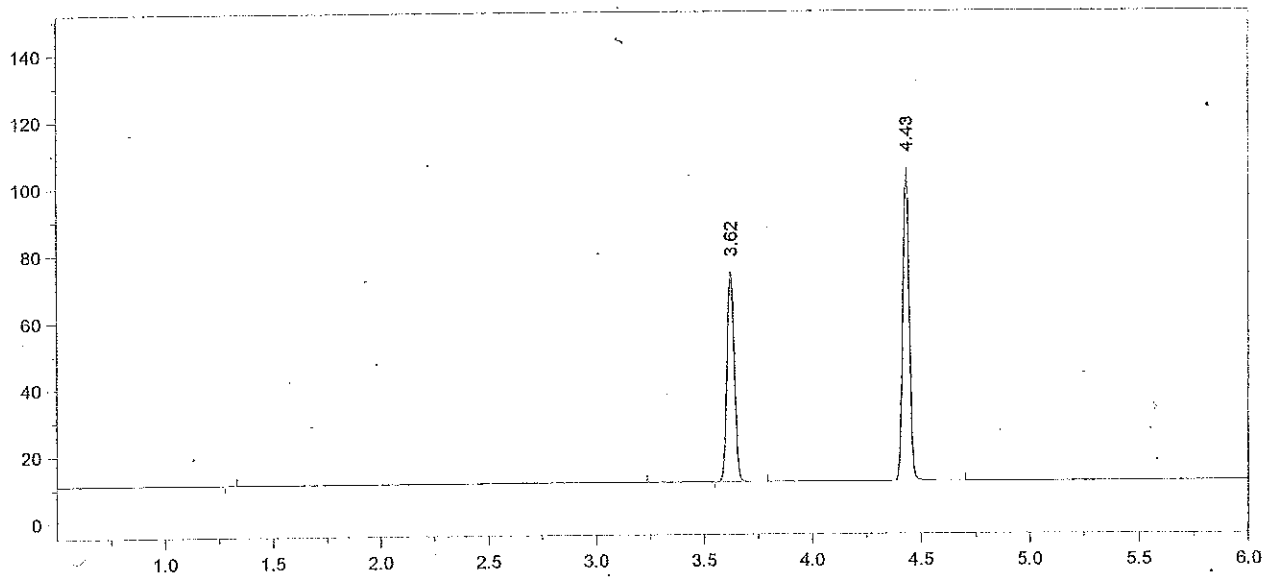
High alarm limit: 0
Low alarm limit: 0
Component constant: 0

Single peak quantification by area

$Y = 5.238385 X + 0$

Linear fit with equal weighting, forced to origin
Coefficient of determination: 0.9998752
Average error: 1.836%
Average CF: 5.1692
RSD: 2.518%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source	Date and time
1	(0.091)	(85146)	--	--	0.091	85146	Manual	8/12/2013 4:03:34 PM
2	0.0063	6884.689	1092808	0.878	0.0063	3.329168E-02	C:\Alcohol Data\VFL10282013\VFL10282013.0003.BND	10/28/2013 11:30:04 AI
3	0.0254	26516.83	1043970	-5.415	0.0254	0.1258502	C:\Alcohol Data\VFL10282013\VFL10282013.0004.BND	10/28/2013 11:46:37 AI
4	0.0822	83406.41	1014677	-1.020	0.0822	0.4262029	C:\Alcohol Data\VFL10282013\VFL10282013.0005.BND	10/28/2013 12:00:22 PM
5	0.2012	220925.7	1098040	-1.457	0.2012	1.038607	C:\Alcohol Data\VFL10282013\VFL10282013.0006.BND	10/28/2013 12:17:56 PM
6	0.4112	401071.6	975368.7	0.410	0.4112	2.162856	C:\Alcohol Data\VFL10282013\VFL10282013.0007.BND	10/28/2013 12:32:57 PM

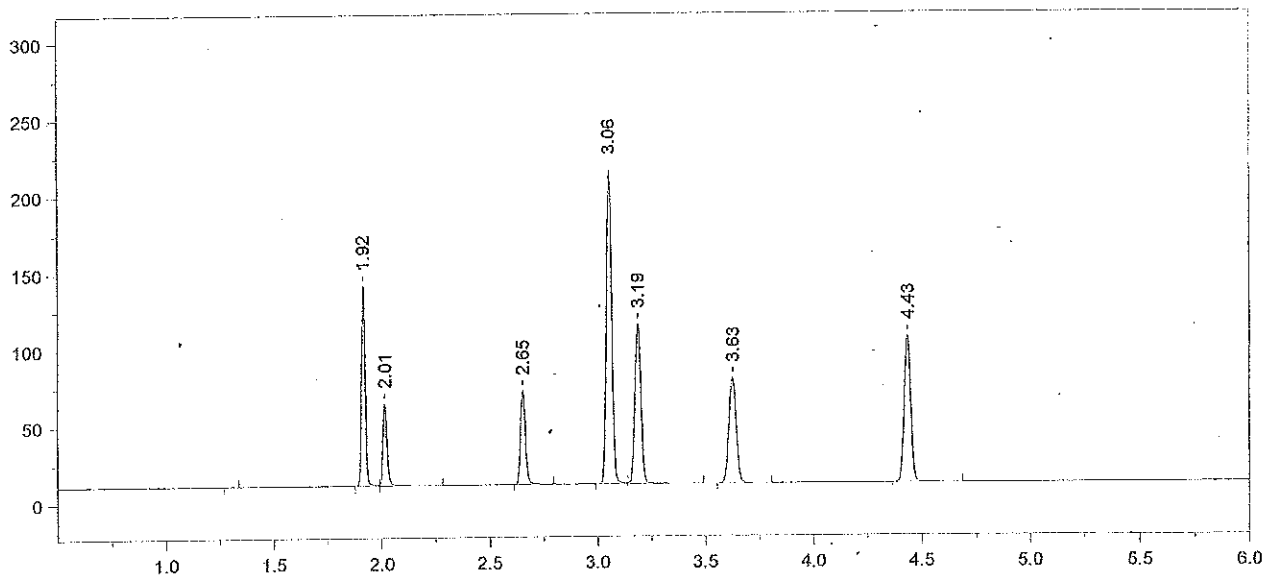


Format File Name = AlcoholVFL.FMT

Today's Date = 10/28/2013
Today's Time = 2:19:39 PM
Bound File Name = VFL10282013.0001.RAW
Sample Name = Blank
Date Taken = 10/28/2013 10:57:05 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	3.62	t-Butanol	145441	0.9603
4	4.43	n-Propanol	197451	1.0000

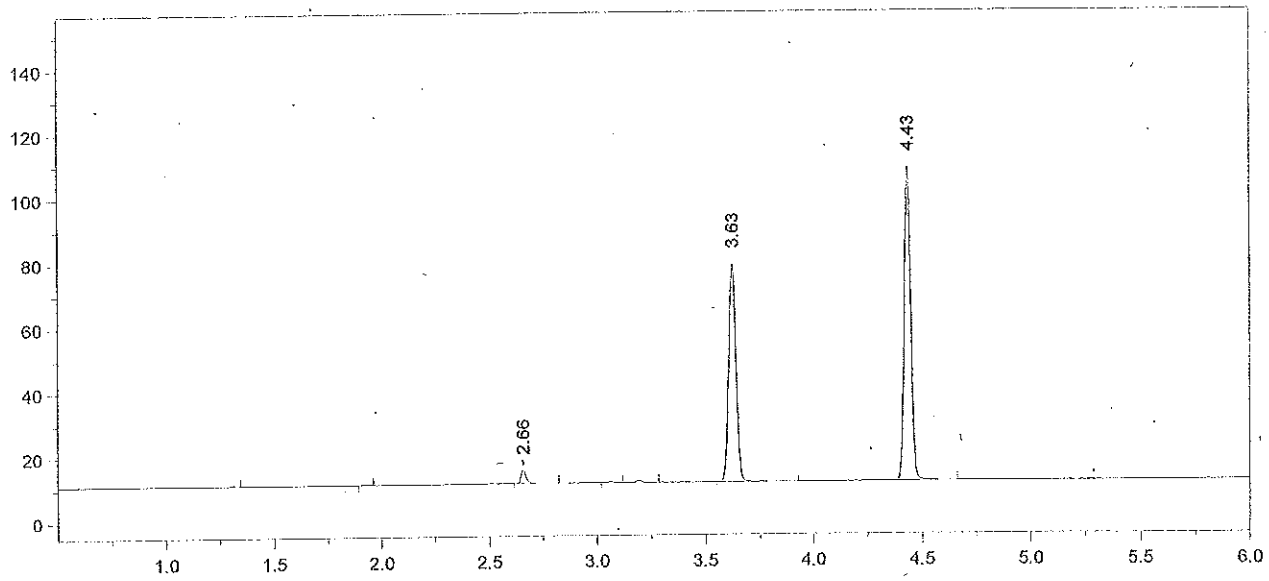
13-19-120



Format File Name = AlcoholVFL.FMT

Today's Date = 10/28/2013
Today's Time = 2:19:47 PM
Bound File Name = VFL10282013.0002.RAW
Sample Name = TMX
Date Taken = 10/28/2013 11:15:03 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10282013.CAL
Calibration Version = 7

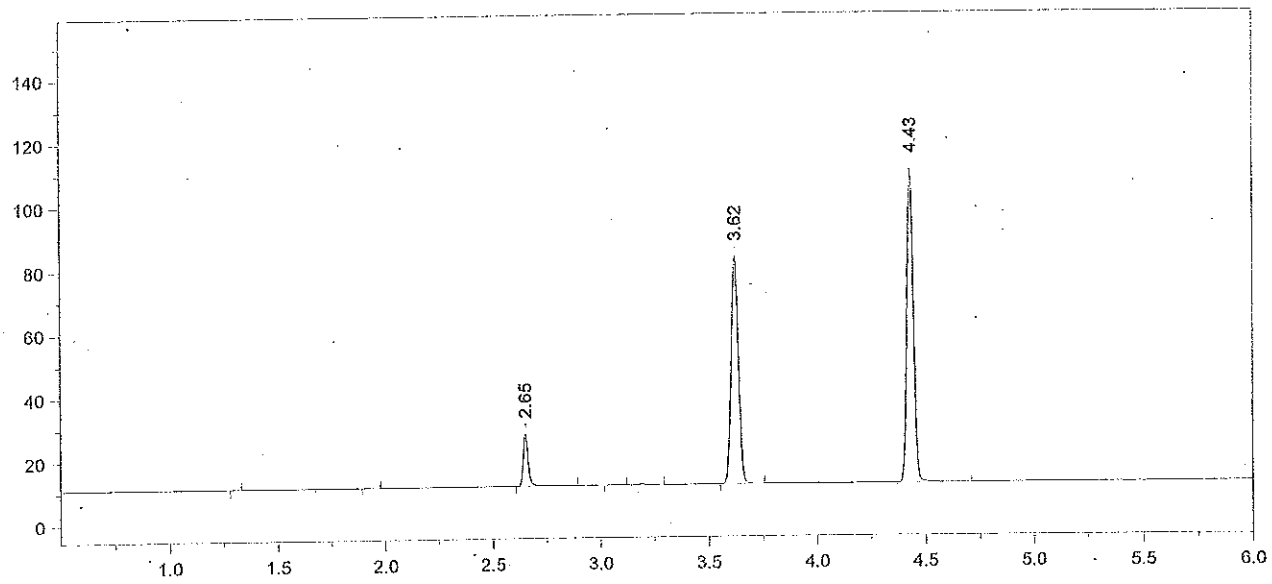
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	1.92	Acetaldehyde	153801	0.0520
3	2.01	Methanol	68956	0.1370
4	2.65	Ethanol	94765	0.0888
5	3.06	Acetone	350309	0.0940
6	3.19	Isopropanol	196433	0.0850
7	3.63	t-Butanol	158737	1.0156
8	4.43	n-Propanol	203774	1.0000



Format File Name = AlcoholVFL.FMT

Today's Date = 10/28/2013
Today's Time = 2:19:53 PM
Bound File Name = VFL10282013.0003.RAW
Sample Name = STD A
Date Taken = 10/28/2013 11:29:54 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10282013.CAL
Calibration Version = 7

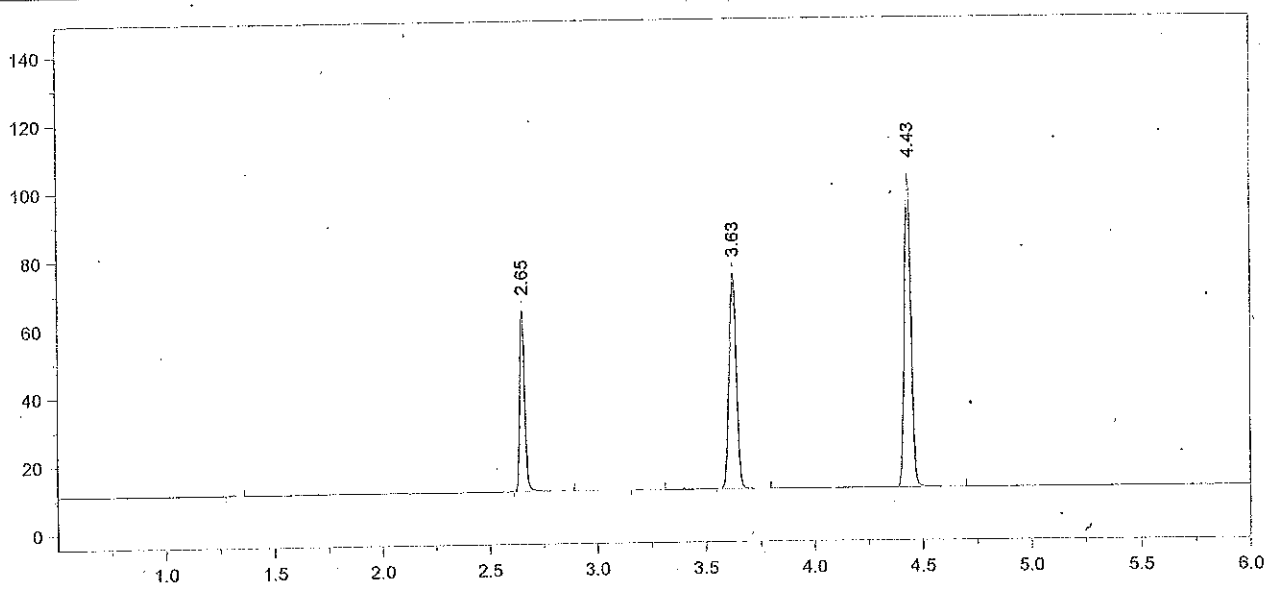
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.66	Ethanol	06885	0.0064
6	3.63	t-Butanol	156057	0.9838
7	4.43	n-Propanol	206799	1.0000



Format File Name = AlcoholVFL.FMT

Today's Date = 10/28/2013
Today's Time = 2:19:59 PM
Bound File Name = VFL10282013.0004.RAW
Sample Name = STD B
Date Taken = 10/28/2013 11:46:28 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	26517	0.0240
6	3.62	t-Butanol	164957	1.0207
7	4.43	n-Propanol	210702	1.0000

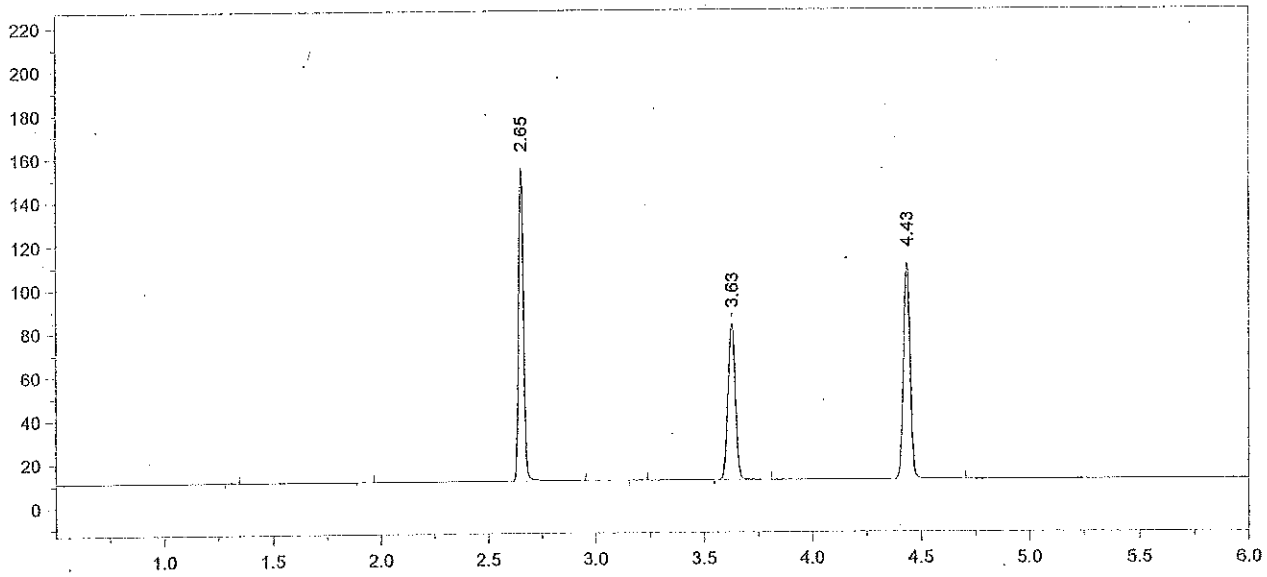


Format File Name = AlcoholVFL.FMT

Today's Date = 10/28/2013
Today's Time = 2:20:05 PM
Bound File Name = VFL10282013.0005.RAW
Sample Name = STD C
Date Taken = 10/28/2013 12:00:14 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	83406	0.0814
4	3.63	t-Butanol	146892	0.9786
5	4.43	n-Propanol	195697	1.0000

13-19-100 10 AEB

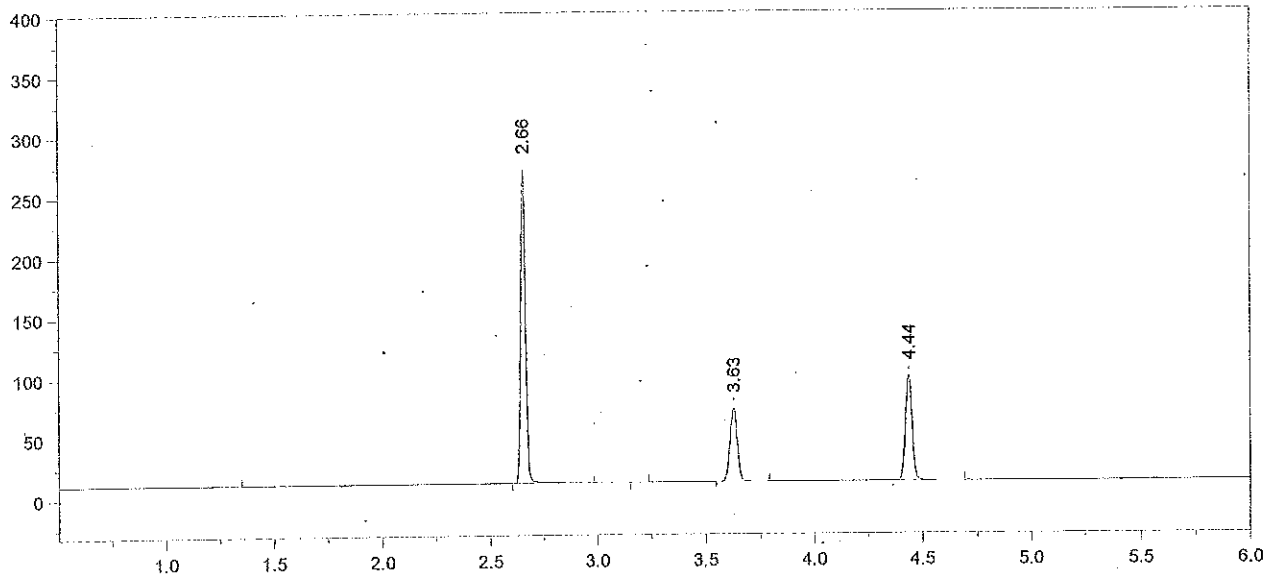


Format File Name = AlcoholVFL.FMT

Today's Date = 10/28/2013
Today's Time = 2:20:10 PM
Bound File Name = VFL10282013.0006.RAW
Sample Name = STD D
Date Taken = 10/28/2013 12:17:52 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	220926	0.1983
5	3.63	t-Butanol	165916	1.0169
6	4.43	n-Propanol	212714	1.0000

13-19-100 11 dcB

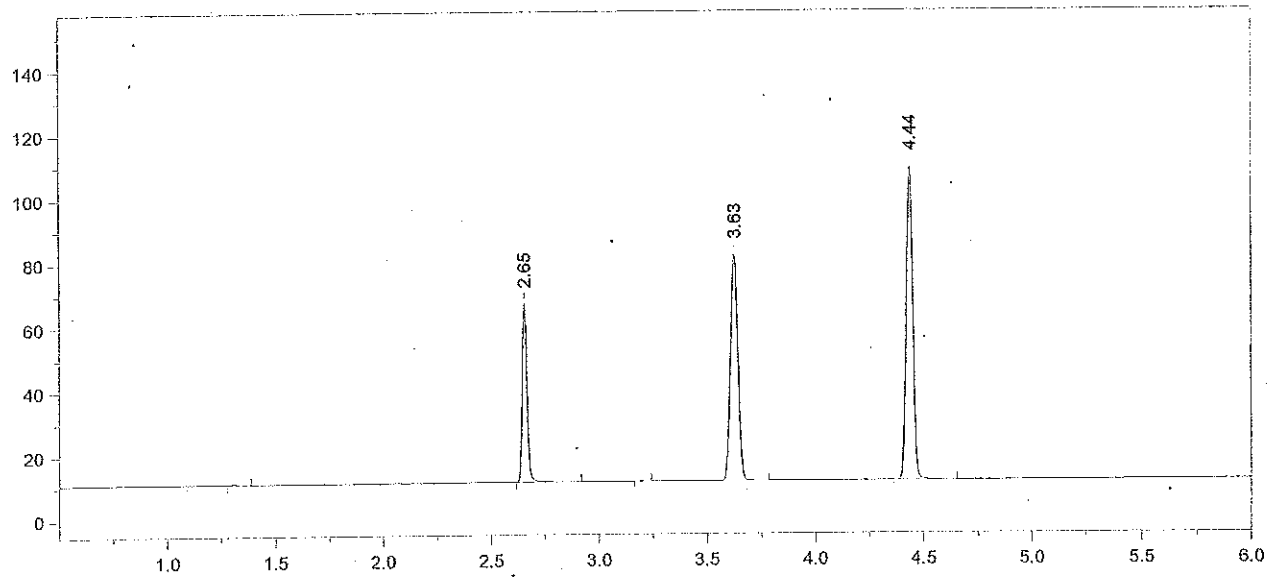


Format File Name = AlcoholVFL.FMT

Today's Date = 10/28/2013
Today's Time = 2:20:16 PM
Bound File Name = VFL10282013.0007.RAW
Sample Name = STD E
Date Taken = 10/28/2013 12:32:48 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	401072	0.4129
4	3.63	t-Butanol	140003	0.9843
5	4.44	n-Propanol	185436	1.0000

13-19-100 12 A B

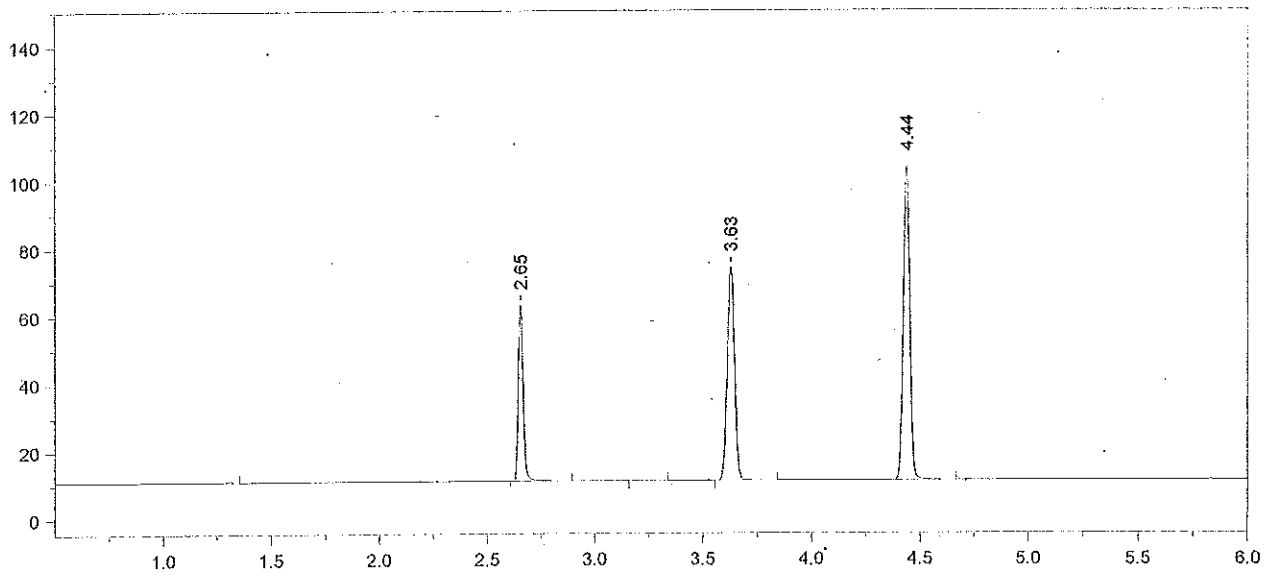


Format File Name = AlcoholVFL.FMT

Today's Date = 10/28/2013
Today's Time = 12:49:18 PM
Bound File Name = VFL10282013.0008.RAW
Sample Name = AQ QC
Date Taken = 10/28/2013 12:49:14 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	86716	0.0797
4	3.63	t-Butanol	163270	1.0254
5	4.44	n-Propanol	207589	1.0000

12-19-100 13 A+B



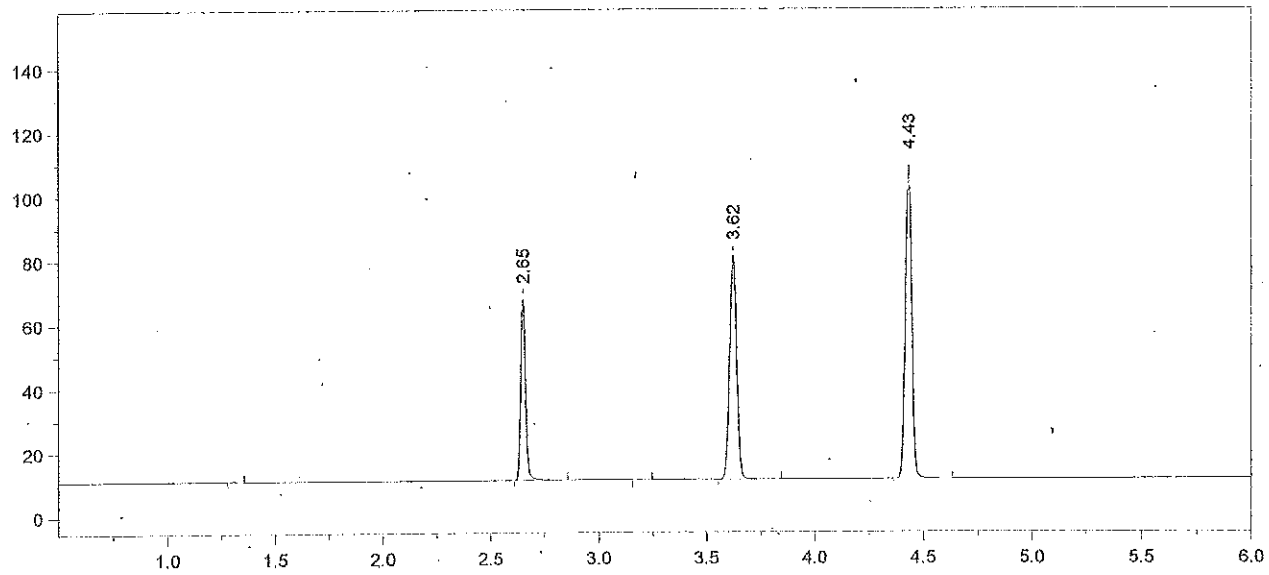
Format File Name = AlcoholVFL.FMT

Today's Date = 10/28/2013
Today's Time = 1:03:12 PM
Bound File Name = VFL10282013.0009.RAW
Sample Name = AQ QC
Date Taken = 10/28/2013 1:03:02 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	82452	0.0802
4	3.63	t-Butanol	146344	0.9718
5	4.44	n-Propanol	196333	1.0000

Avg vial 8 + 9 = 0.080
100%
10/28/13
DLB

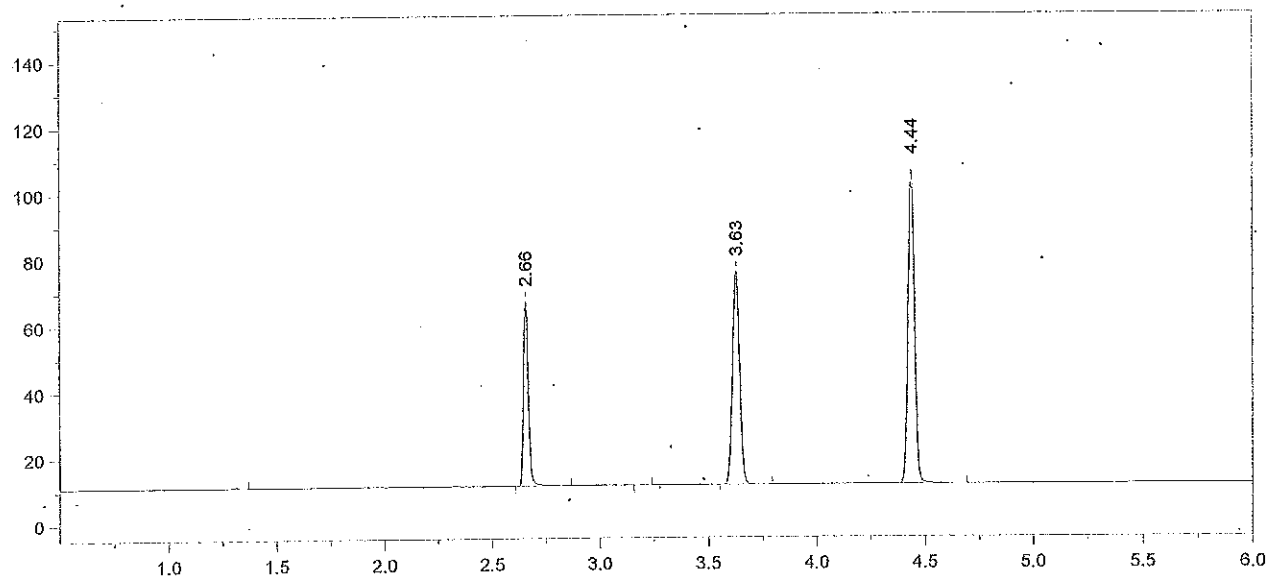
13-19 100 (4) DLB



Format File Name = AlcoholVFL.FMT

Today's Date = 10/28/2013
Today's Time = 1:19:03 PM
Bound File Name = VFL10282013.0010.RAW
Sample Name = CCS
Date Taken = 10/28/2013 1:18:58 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	87833	0.0807
4	3.62	t-Butanol	161511	1.0139
5	4.43	n-Propanol	207684	1.0000



Format File Name = AlcoholVFL.FMT

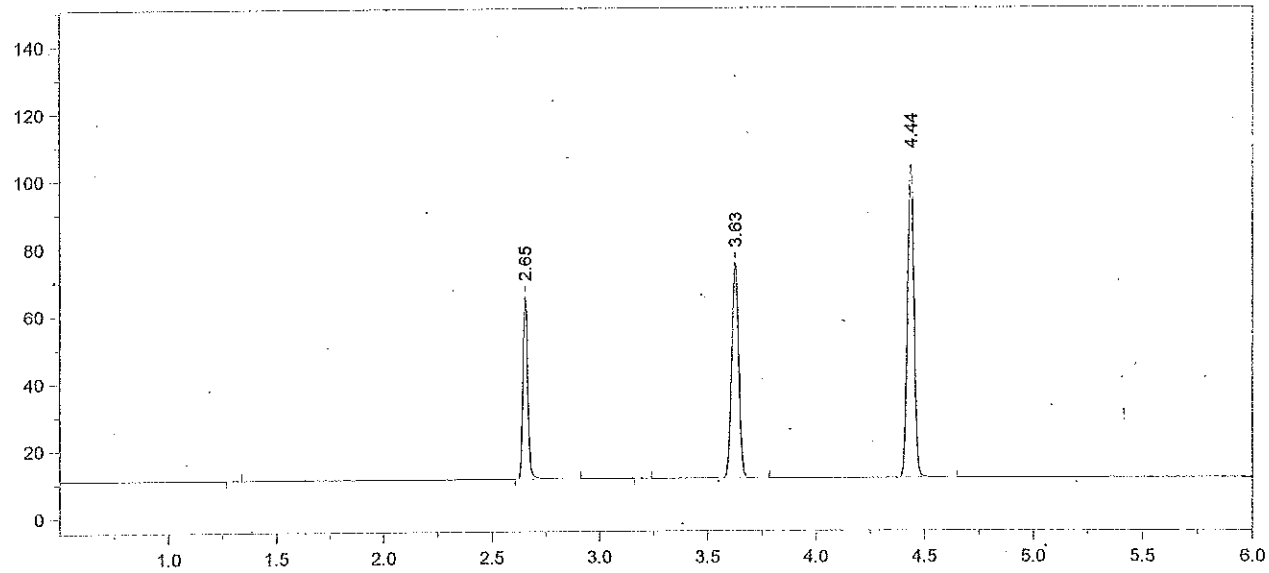
Today's Date = 10/28/2013
Today's Time = 1:34:37 PM
Bound File Name = VFL10282013.0011.RAW
Sample Name = CCS
Date Taken = 10/28/2013 1:34:27 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	87211	0.0826
4	3.63	t-Butanol	148630	0.9608
5	4.44	n-Propanol	201675	1.0000

Avg vials 10 + 11 = 0.081

10/28/13

13-19-100

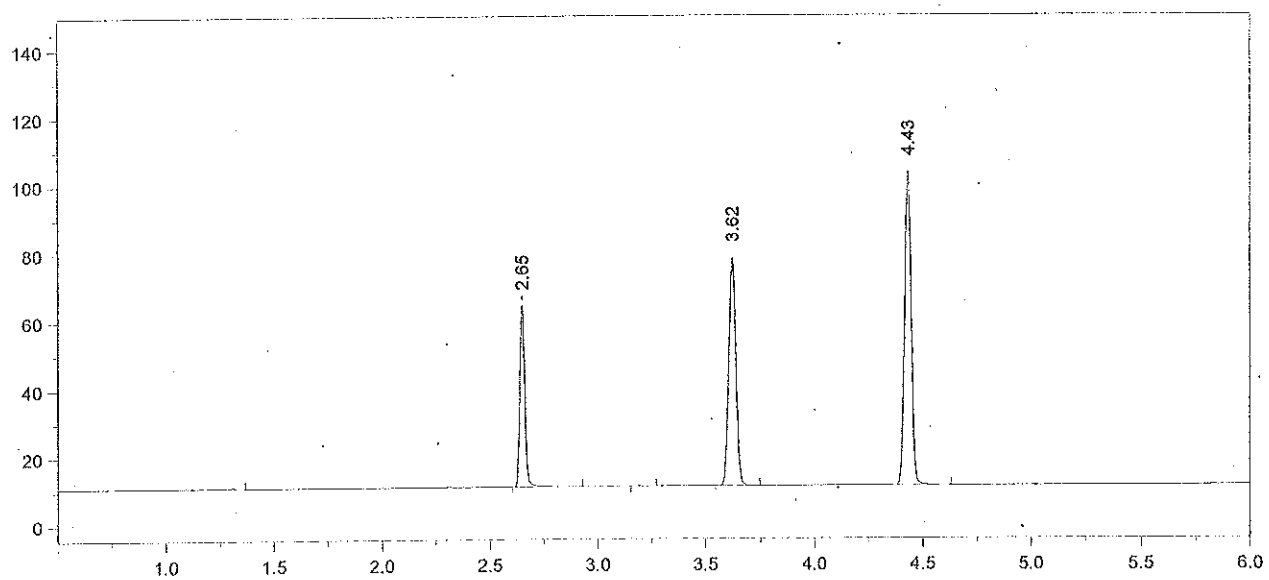


Format File Name = AlcoholVFL.FMT

Today's Date = 10/28/2013
Today's Time = 3:37:38 PM
Bound File Name = VFL10282013.0019.RAW
Sample Name = CCS
Date Taken = 10/28/2013 3:37:28 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	85271	0.0823
4	3.63	t-Butanol	147984	0.9760
5	4.44	n-Propanol	197681	1.0000

13-19-109 17 8 of 8



Format File Name = AlcoholVFL.FMT

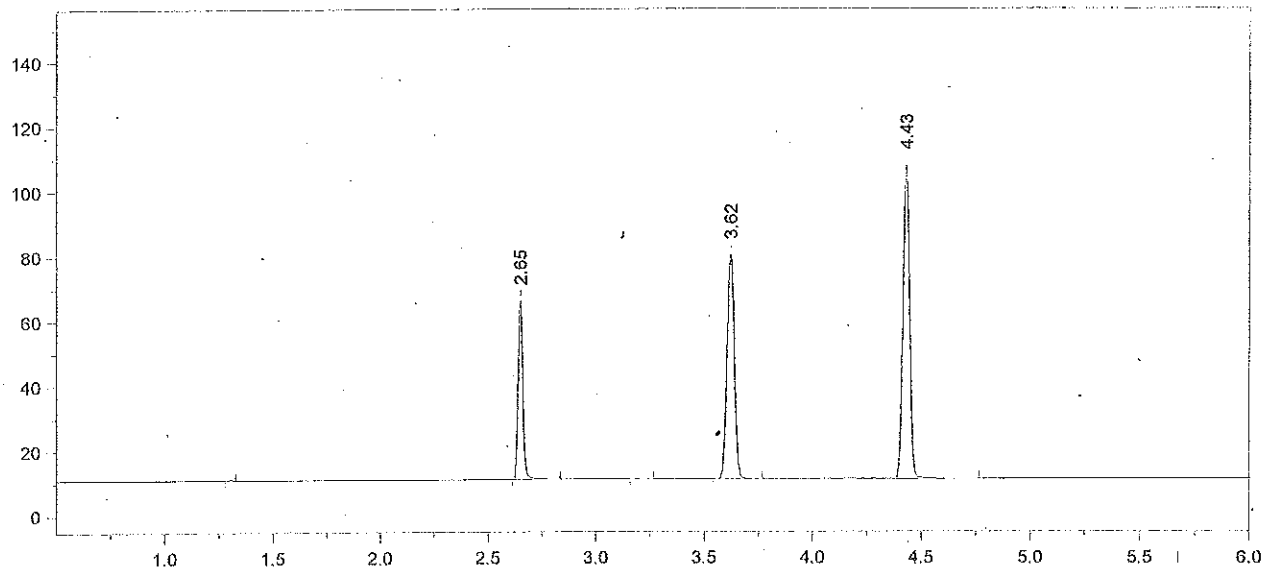
Today's Date = 10/28/2013
Today's Time = 3:55:07 PM
Bound File Name = VFL10282013.0020.RAW
Sample Name = CCS
Date Taken = 10/28/2013 3:55:02 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	83291	0.0809
4	3.62	t-Butanol	155016	1.0283
5	4.43	n-Propanol	196538	1.0000

Avg vials 19 + 20 = 0.081

10/29/13

13-19-140 18

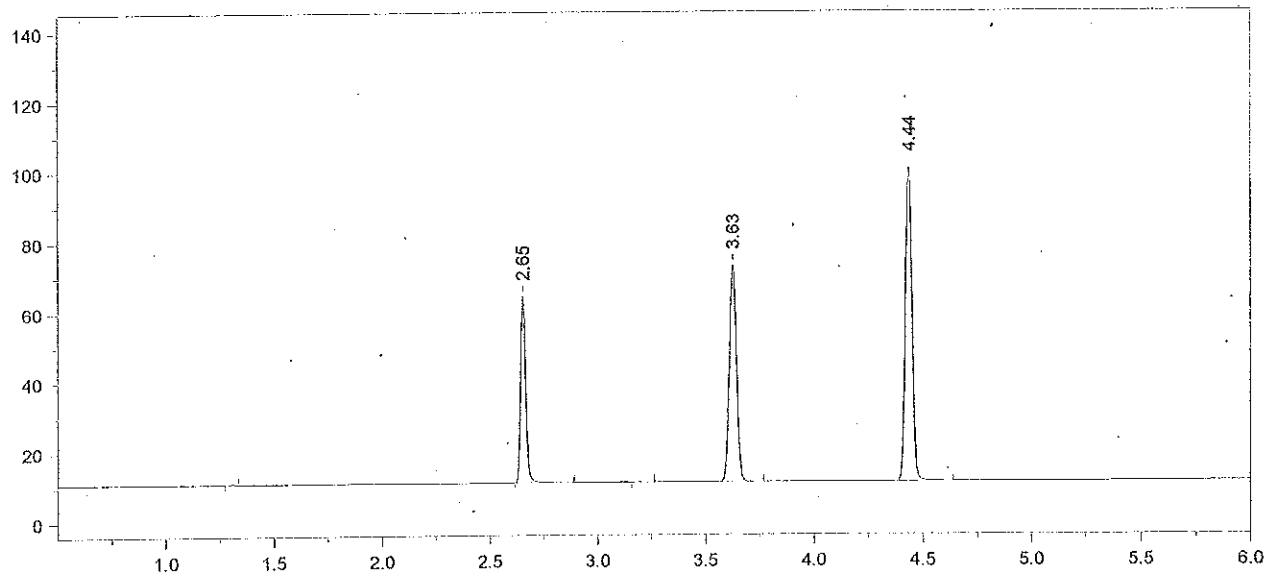


Format File Name = AlcoholVFL.FMT

Today's Date = 10/28/2013
Today's Time = 6:00:46 PM
Bound File Name = VFL10282013.0028.RAW
Sample Name = CCS
Date Taken = 10/28/2013 6:00:37 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	86613	0.0803
4	3.62	t-Butanol	160543	1.0170
5	4.43	n-Propanol	205805	1.0000

13-19-100 19



Format File Name = AlcoholVFL.FMT

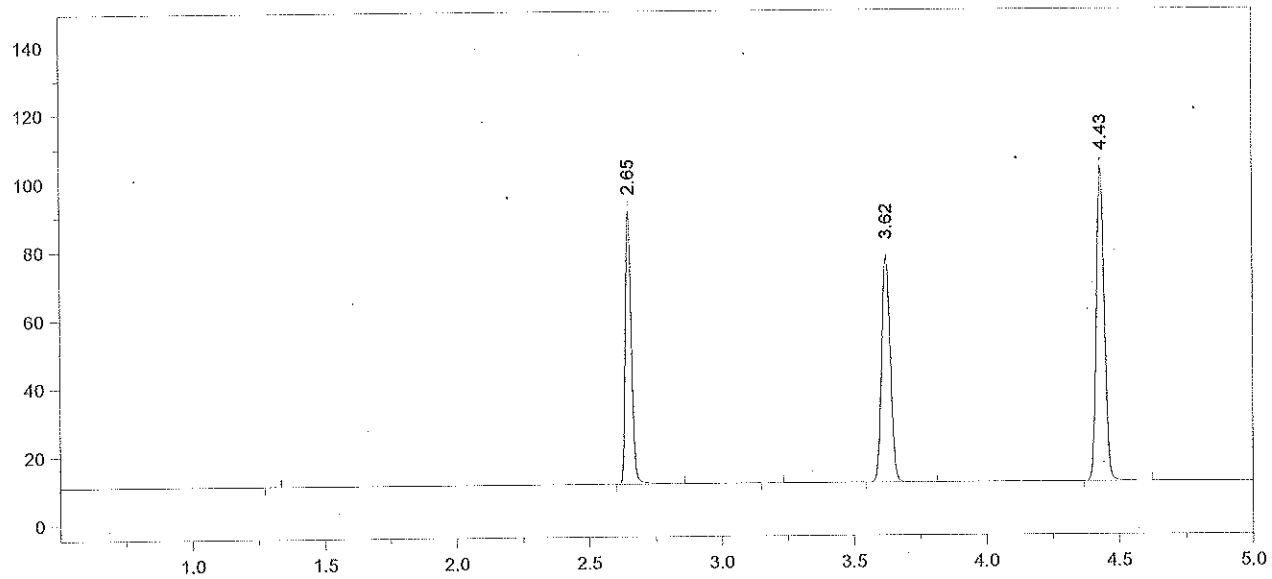
Today's Date = 10/28/2013
Today's Time = 6:14:42 PM
Bound File Name = VFL10282013.0029.RAW
Sample Name = CCS
Date Taken = 10/28/2013 6:14:37 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	83062	0.0829
4	3.63	t-Butanol	143230	0.9763
5	4.44	n-Propanol	191260	1.0000

Avg vials 28 + 29 = 0.081

10/29/13

13-19-100 20

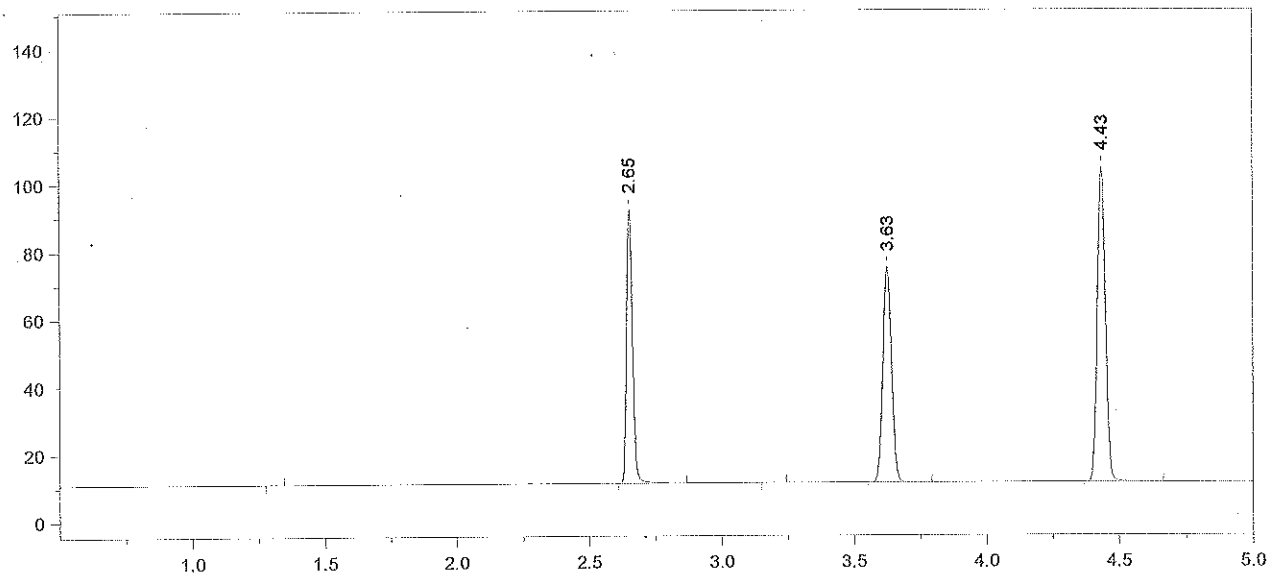


Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/29/2013
Today's Time = 10:01:49 AM
Bound File Name = VFL10282013.0030.RAW
Sample Name = 0.10 ALB
Date Taken = 10/28/2013 6:32:04 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	123592	0.1211	0.0988
4	3.62	t-Butanol	153591	1.0275	0.8387
5	4.43	n-Propanol	194879	1.0000	0.8162

13-19 100 21 AeB

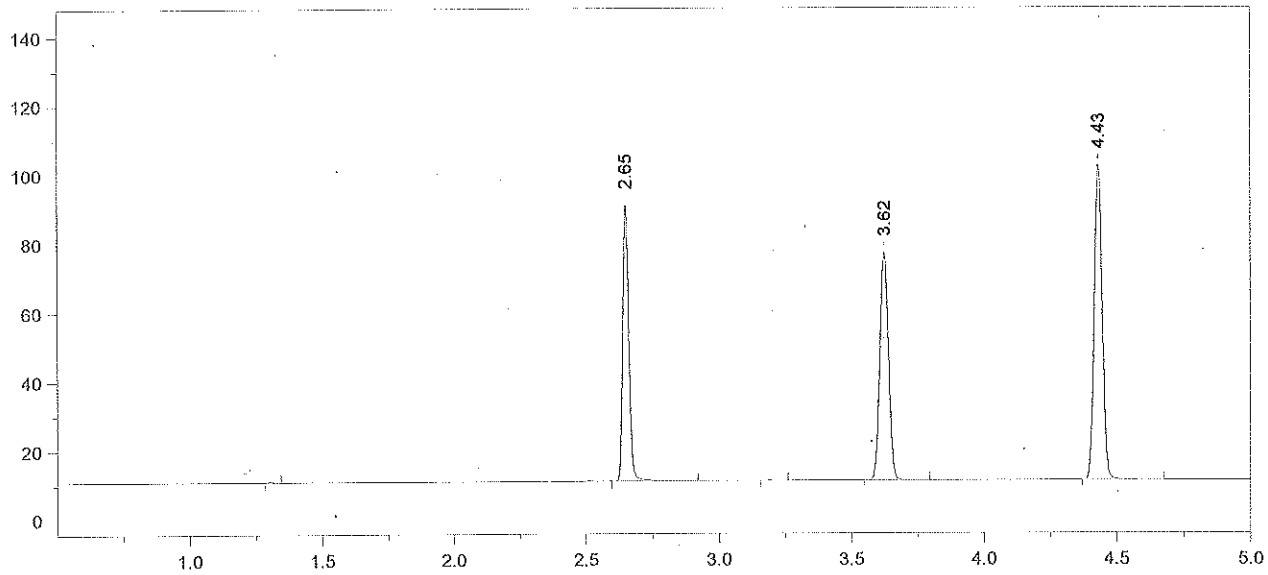


Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/29/2013
Today's Time = 10:01:55 AM
Bound File Name = VFL10282013.0031.RAW
Sample Name = 0.10 ALB
Date Taken = 10/28/2013 6:45:57 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	125911	0.1213	0.0990
4	3.63	t-Butanol	147606	0.9715	0.7930
5	4.43	n-Propanol	198083	1.0000	0.8162

13-19-100 22 CB

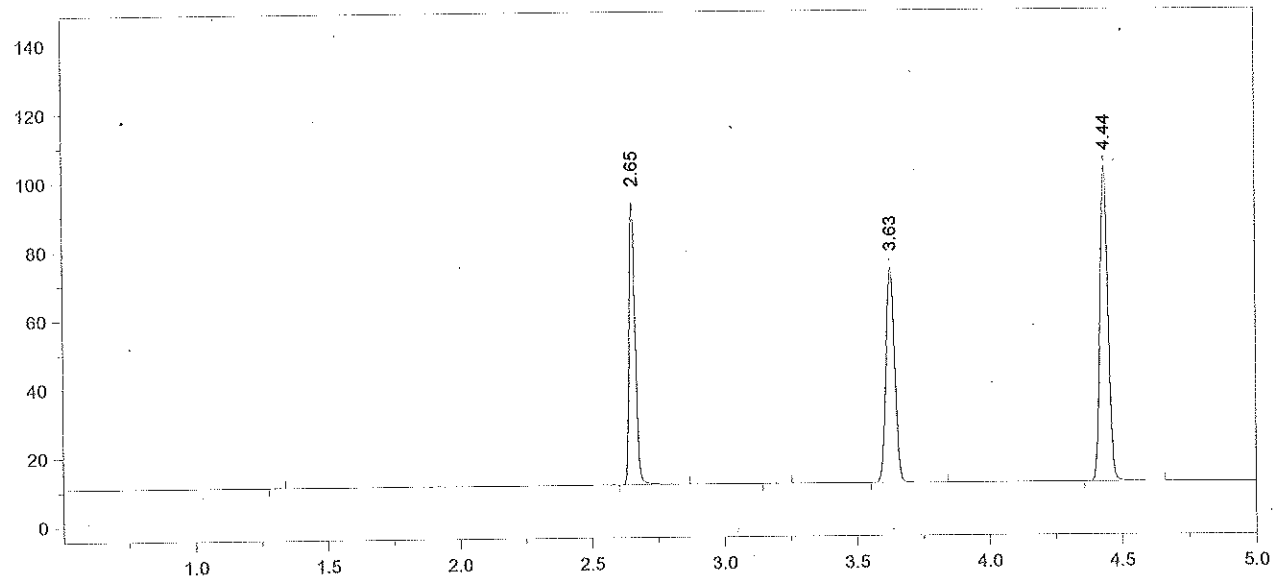


Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/29/2013 Today's Time = 10:02:01 AM
Bound File Name = VFL10282013.0032.RAW
Sample Name = 0.10 ALB
Date Taken = 10/28/2013 7:03:31 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10282013.CAL Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	124120	0.1220	0.0996
4	3.62	t-Butanol	152965	1.0268	0.8381
5	4.43	n-Propanol	194218	1.0000	0.8162

13-19-100 23 ALB

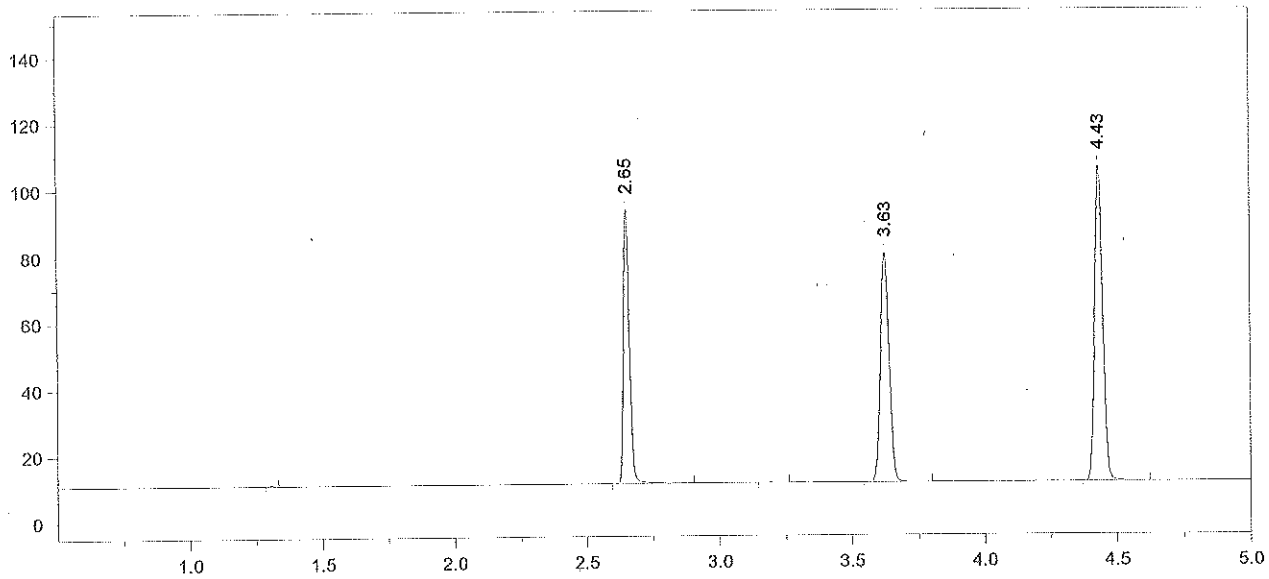


Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/29/2013
Today's Time = 10:02:06 AM
Bound File Name = VFL10282013.0033.RAW
Sample Name = 0.10 ALB
Date Taken = 10/28/2013 7:17:11 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	127762	0.1248	0.1019
4	3.63	t-Butanol	145634	0.9719	0.7933
5	4.44	n-Propanol	195352	1.0000	0.8162

13-19-100 24

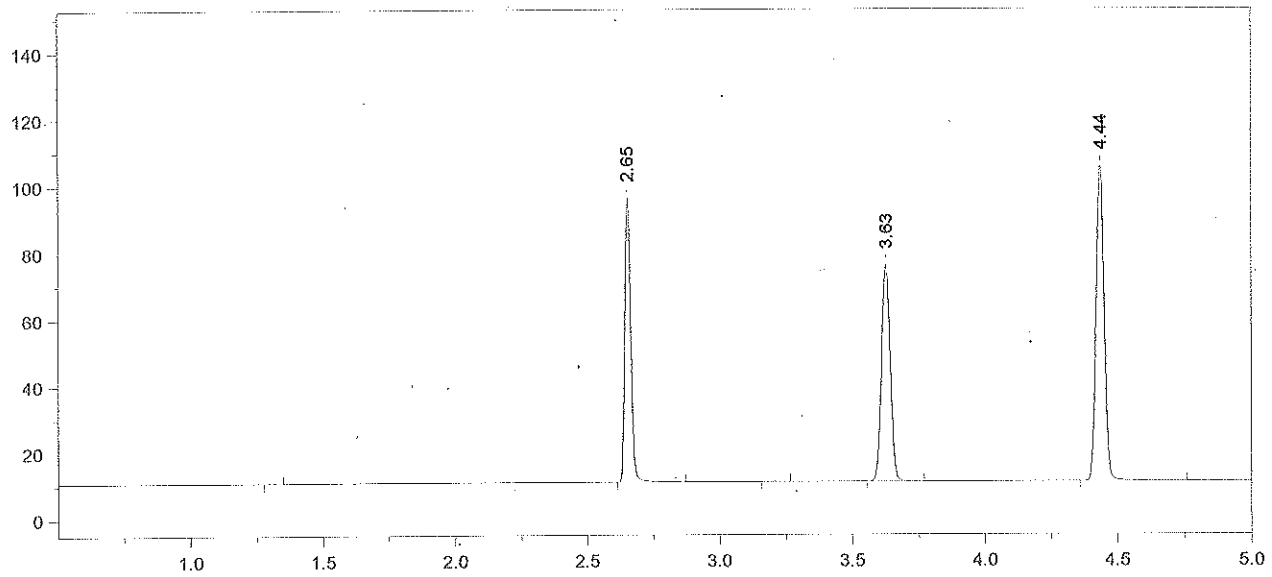


Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/29/2013
Today's Time = 10:02:14 AM
Bound File Name = VFL10282013.0034.RAW
Sample Name = 0.10 ALB
Date Taken = 10/28/2013 7:34:55 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	128458	0.1218	0.0994
4	3.63	t-Butanol	159373	1.0320	0.8423
5	4.43	n-Propanol	201335	1.0000	0.8162

13-19-100 25 AeB

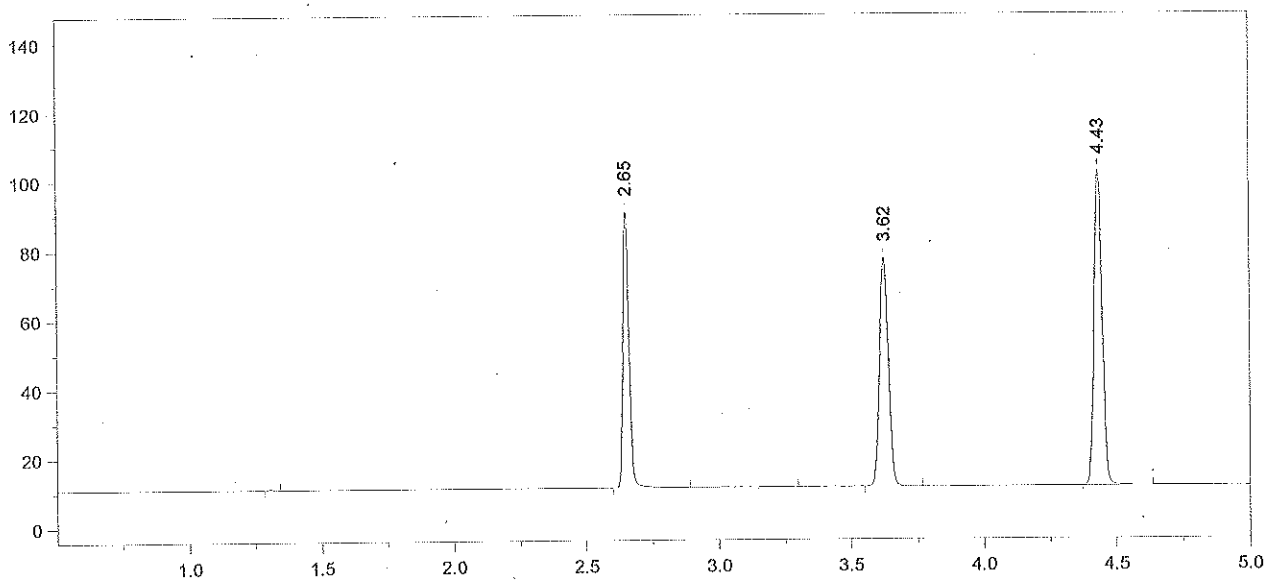


Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/29/2013 Today's Time = 10:02:21 AM
Bound File Name = VFL10282013.0035.RAW
Sample Name = 0.10 ALB
Date Taken = 10/28/2013 7:48:43 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10282013.CAL Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	131924	0.1247	0.1018
4	3.63	t-Butanol	150009	0.9687	0.7907
5	4.44	n-Propanol	201890	1.0000	0.8162

13-19-100 26



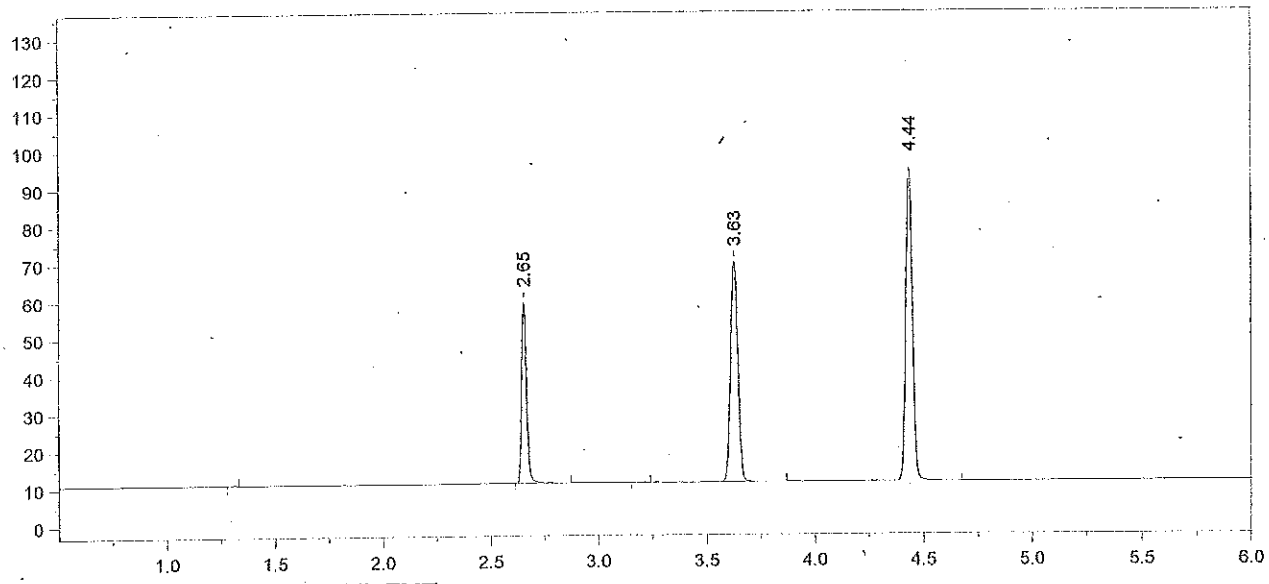
Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/29/2013
Today's Time = 10:02:27 AM
Bound File Name = VFL10282013.0036.RAW
Sample Name = 0.10 ALB
Date Taken = 10/28/2013 8:06:22 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	124424	0.1225	0.1000
4	3.62	t-Butanol	153278	1.0307	0.8413
5	4.43	n-Propanol	193885	1.0000	0.8162

13-19-100

Chrom Perfect Chromatogram Report

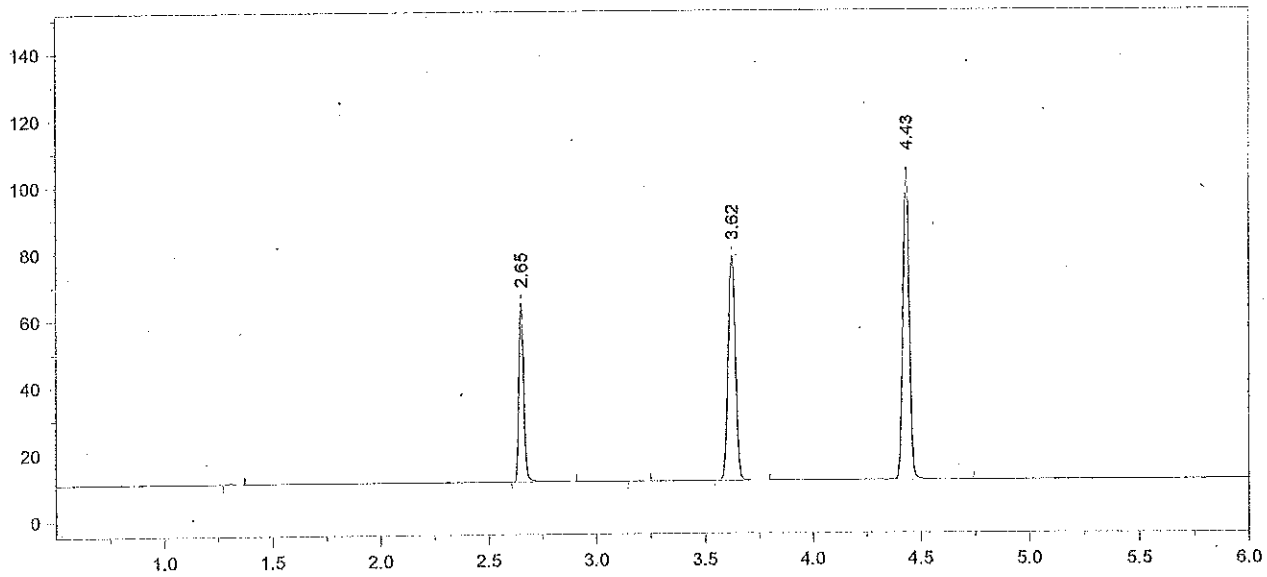


Format File Name = AlcoholVFL.FMT

Today's Date = 10/28/2013
Today's Time = 8:20:37 PM
Bound File Name = VFL10282013.0037.RAW
Sample Name = CCS
Date Taken = 10/28/2013 8:20:30 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	76526	0.0824
4	3.63	t-Butanol	136455	1.0034
5	4.44	n-Propanol	177303	1.0000

13-19-100 28 AB



Format File Name = AlcoholVFL.FMT

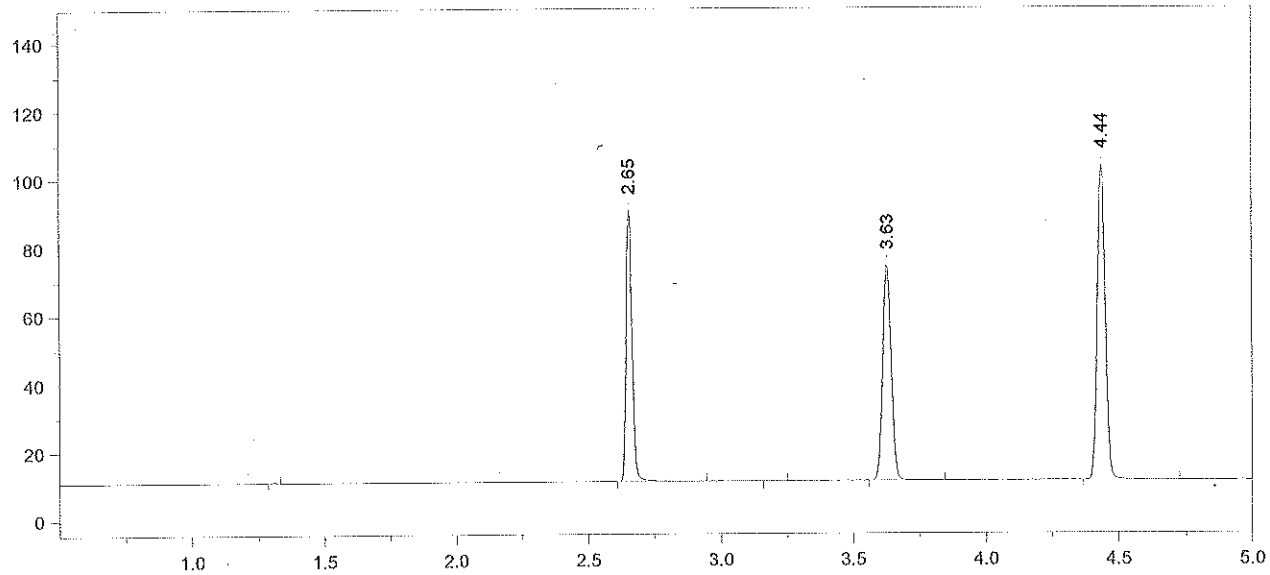
Today's Date = 10/28/2013
Today's Time = 8:36:18 PM
Bound File Name = VFL10282013.0038.RAW
Sample Name = CCS
Date Taken = 10/28/2013 8:36:09 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	83858	0.0804
4	3.62	t-Butanol	156542	1.0256
5	4.43	n-Propanol	198998	1.0000

Avg vals 37 + 38 = 0.081

10/29/13 AMS

13-19-100 29 AMS

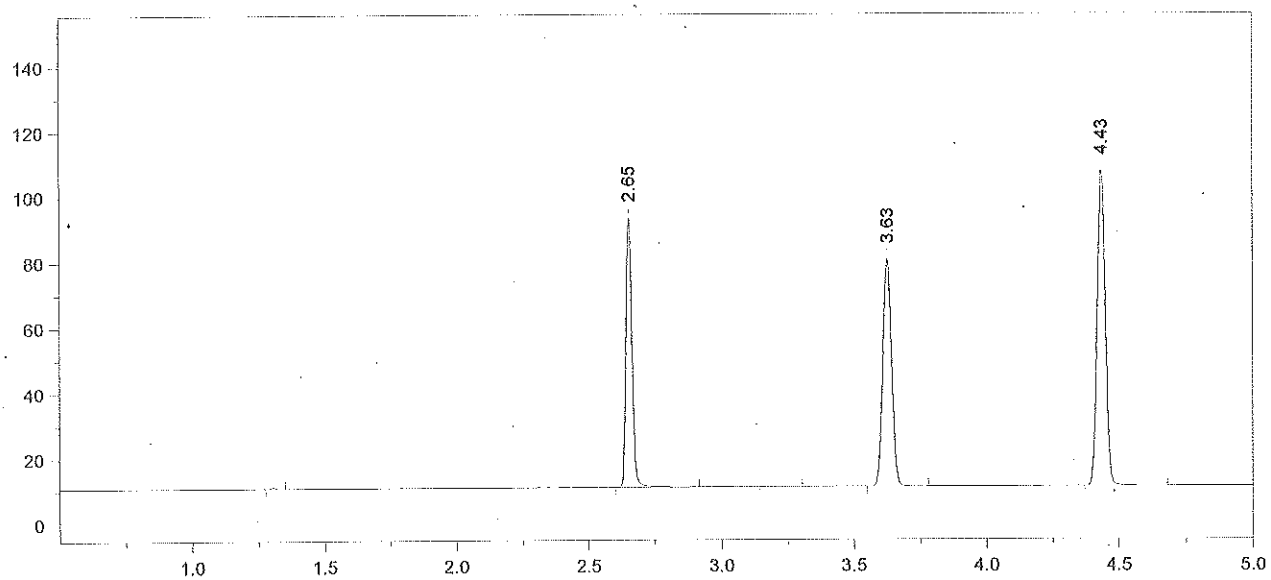


Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/29/2013
Today's Time = 10:02:34 AM
Bound File Name = VFL10282013.0039.RAW
Sample Name = 0.10 RLM
Date Taken = 10/28/2013 8:51:27 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	125052	0.1221	0.0996
4	3.63	t-Butanol	146316	0.9753	0.7961
5	4.44	n-Propanol	195588	1.0000	0.8162

13-19-100 30 4&5

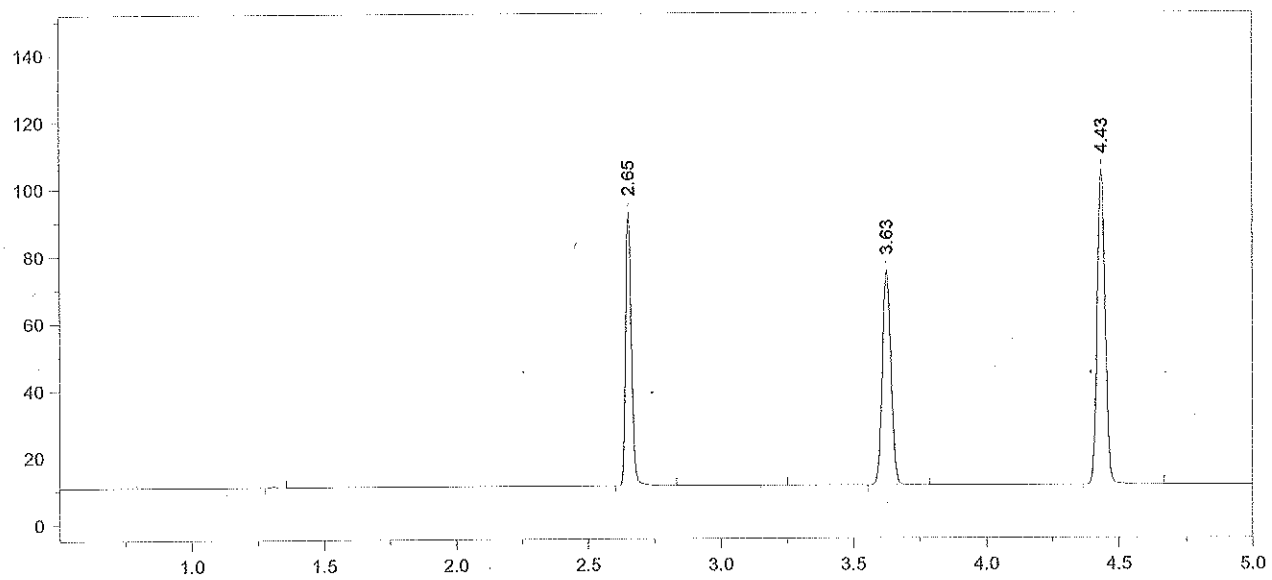


Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/29/2013 Today's Time = 10:02:39 AM
Bound File Name = VFL10282013.0040.RAW
Sample Name = 0.10 RLM
Date Taken = 10/28/2013 9:06:00 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10282013.CAL Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	128160	0.1195	0.0975
4	3.63	t-Butanol	160443	1.0218	0.8340
5	4.43	n-Propanol	204716	1.0000	0.8162

13-19 (V) 31 Ex B

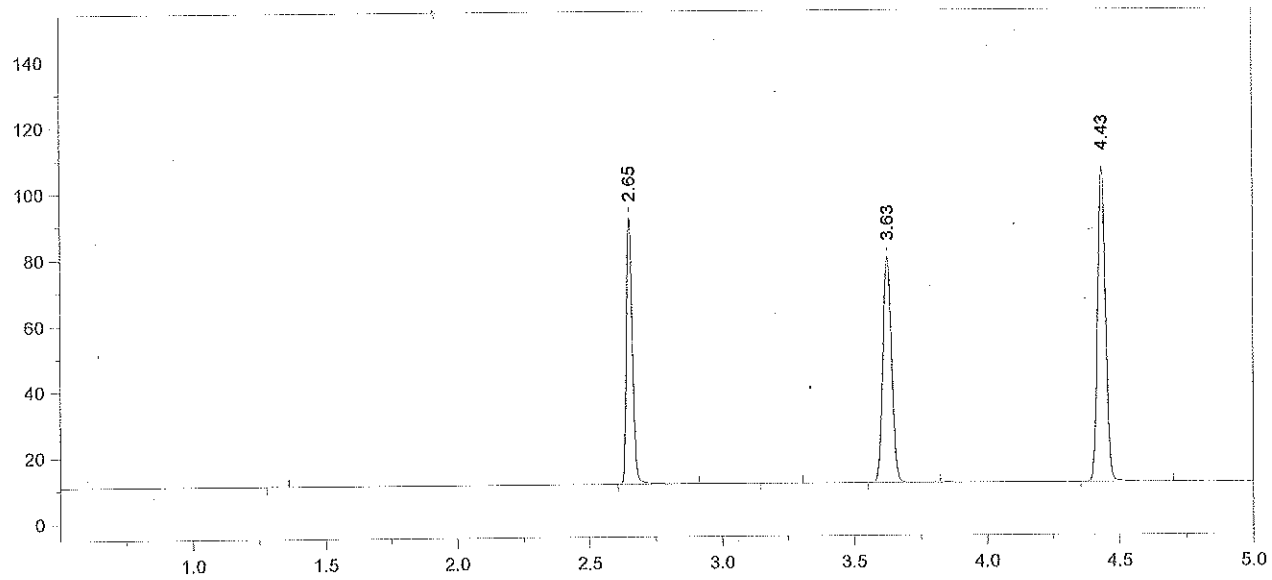


Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/29/2013 Today's Time = 10:02:45 AM
Bound File Name = VFL10282013.0041.RAW
Sample Name = 0.10 RLM
Date Taken = 10/28/2013 9:21:34 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10282013.CAL Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	126391	0.1211	0.0988
4	3.63	t-Butanol	147582	0.9658	0.7883
5	4.43	n-Propanol	199228	1.0000	0.8162

13-19-(02) 32

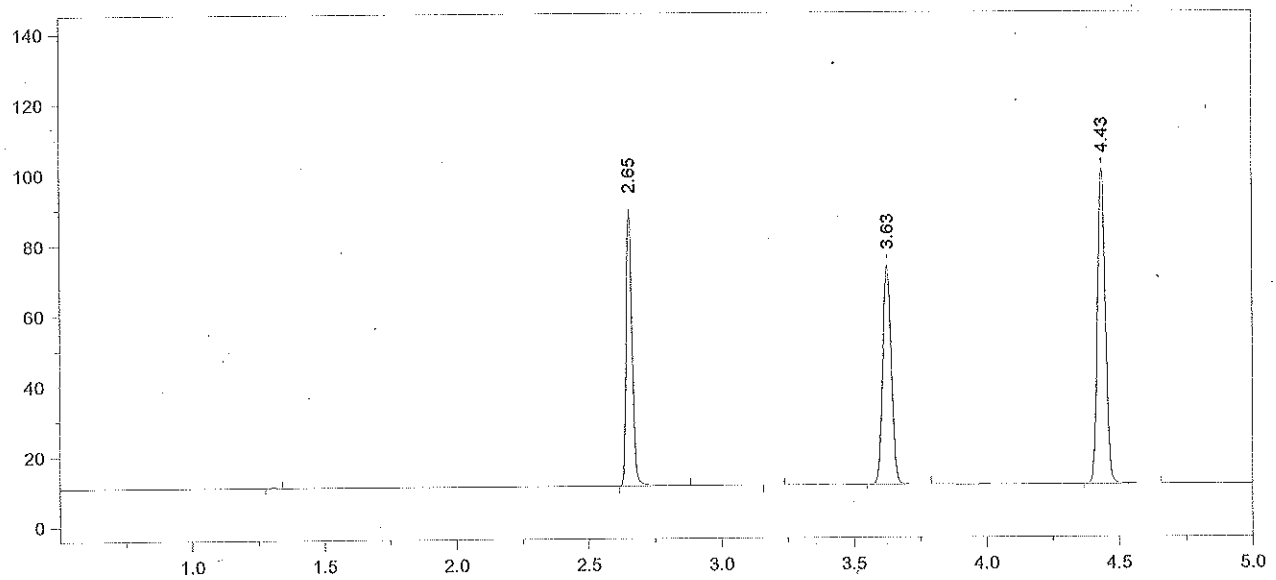


Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/29/2013
Today's Time = 10:02:53 AM
Bound File Name = VFL10282013.0042.RAW
Sample Name = 0.10 RLM
Date Taken = 10/28/2013 9:37:47 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	126443	0.1192	0.0973
4	3.63	t-Butanol	159172	1.0249	0.8366
5	4.43	n-Propanol	202472	1.0000	0.8162

13-19-100 33 A B

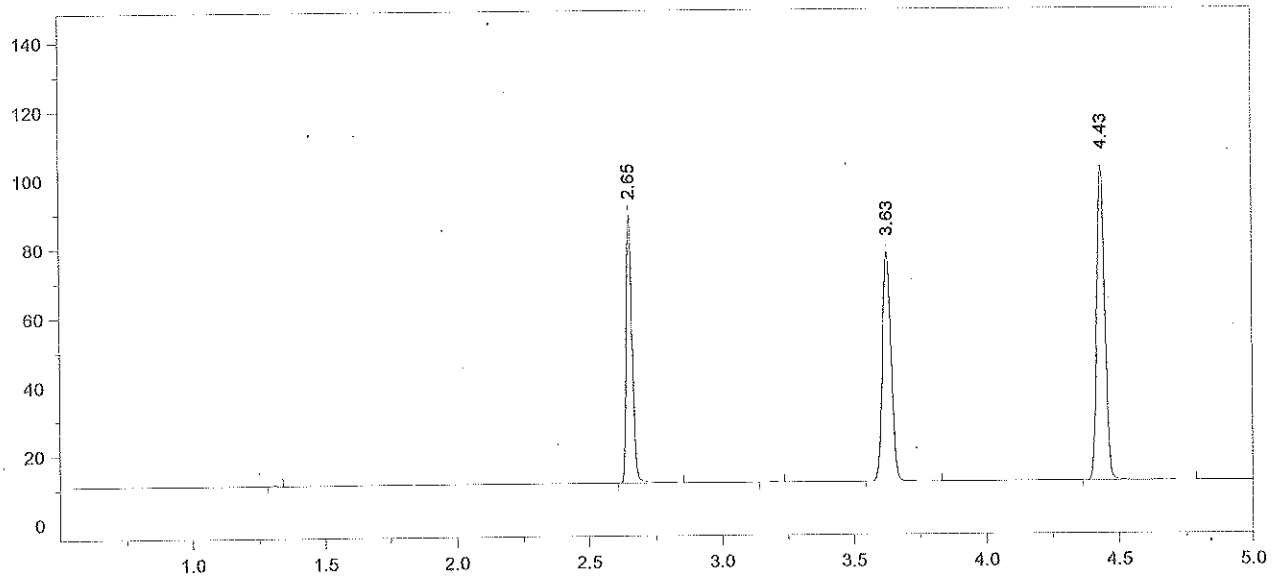


Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/29/2013
Today's Time = 10:02:59 AM
Bound File Name = VFL10282013.0043.RAW
Sample Name = 0.10 RLM
Date Taken = 10/28/2013 9:52:02 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	122274	0.1224	0.0999
4	3.63	t-Butanol	144197	0.9862	0.8049
5	4.43	n-Propanol	190636	1.0000	0.8162

13-19-HD

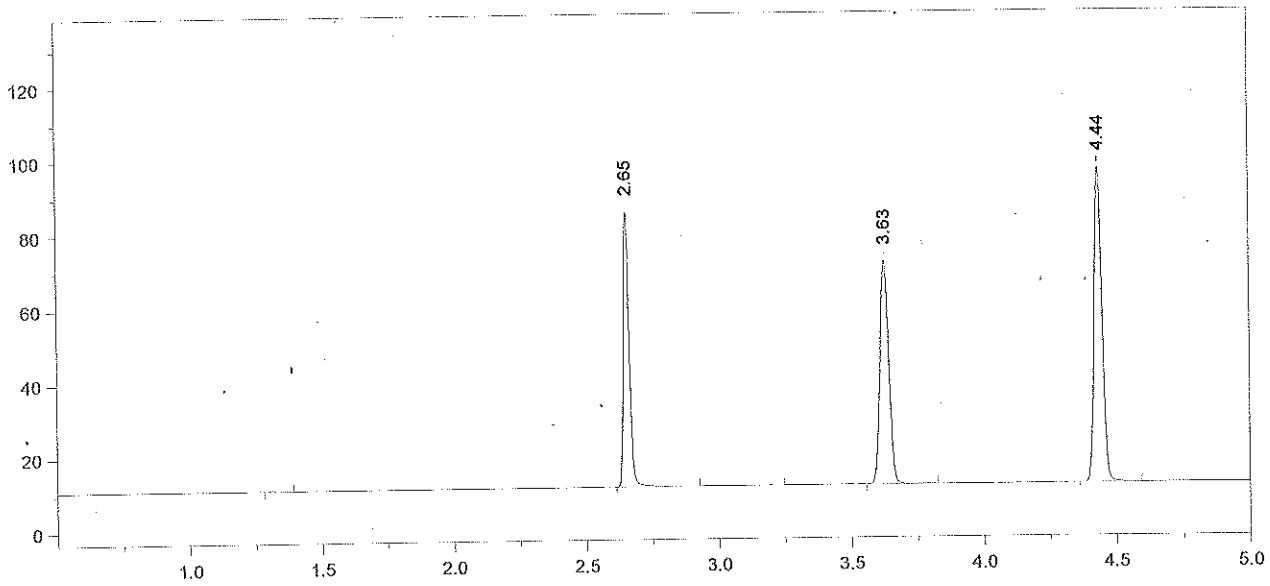


Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/29/2013
Today's Time = 10:03:05 AM
Bound File Name = VFL10282013.0044.RAW
Sample Name = 0.10 RLM
Date Taken = 10/28/2013 10:09:11 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	120397	0.1177	0.0961
4	3.63	t-Butanol	154185	1.0298	0.8405
5	4.43	n-Propanol	195209	1.0000	0.8162

13-19-100 3.5

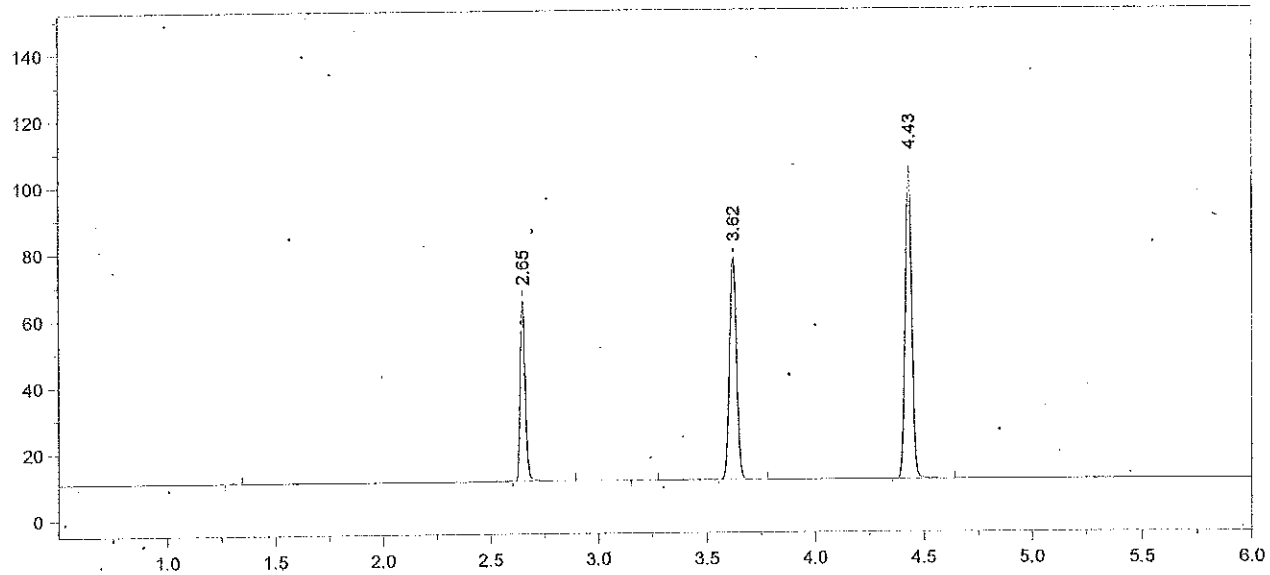


Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/29/2013
Today's Time = 10:03:11 AM
Bound File Name = VFL10282013.0045.RAW
Sample Name = 0.10 RLM
Date Taken = 10/28/2013 10:24:02 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	114989	0.1216	0.0992
4	3.63	t-Butanol	140168	1.0120	0.8260
5	4.44	n-Propanol	180573	1.0000	0.8162

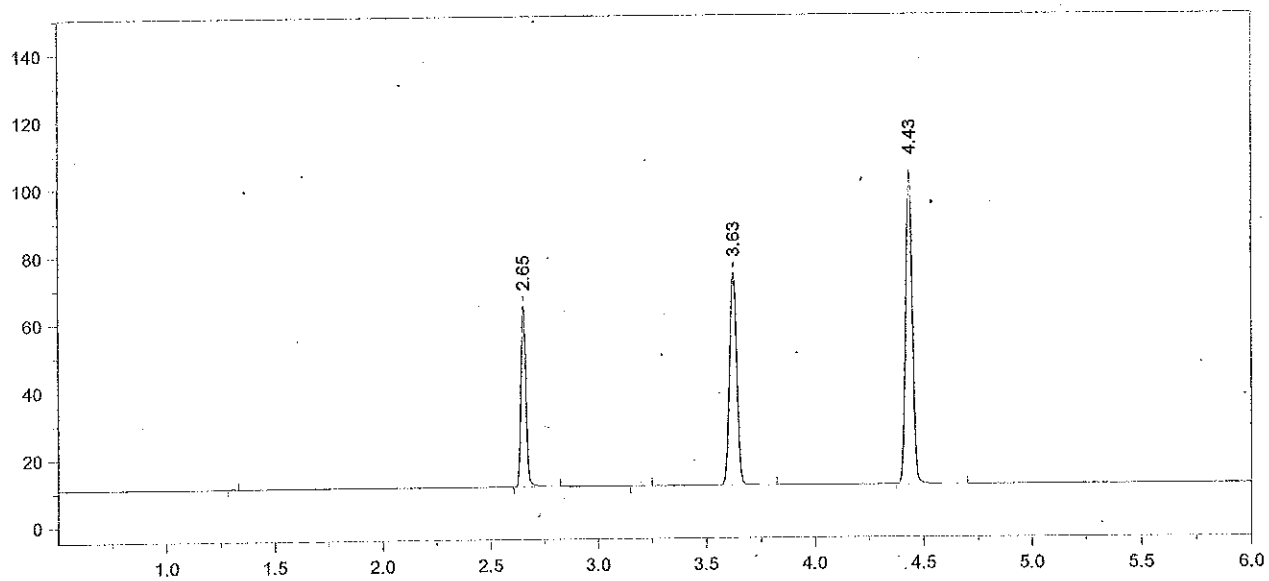
13-19-100 36



Format File Name = AlcoholVFL.FMT

Today's Date = 10/28/2013
Today's Time = 10:40:45 PM
Bound File Name = VFL10282013.0046.RAW
Sample Name = CCS
Date Taken = 10/28/2013 10:40:39 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	85098	0.0816
4	3.62	t-Butanol	155373	1.0171
5	4.43	n-Propanol	199155	1.0000



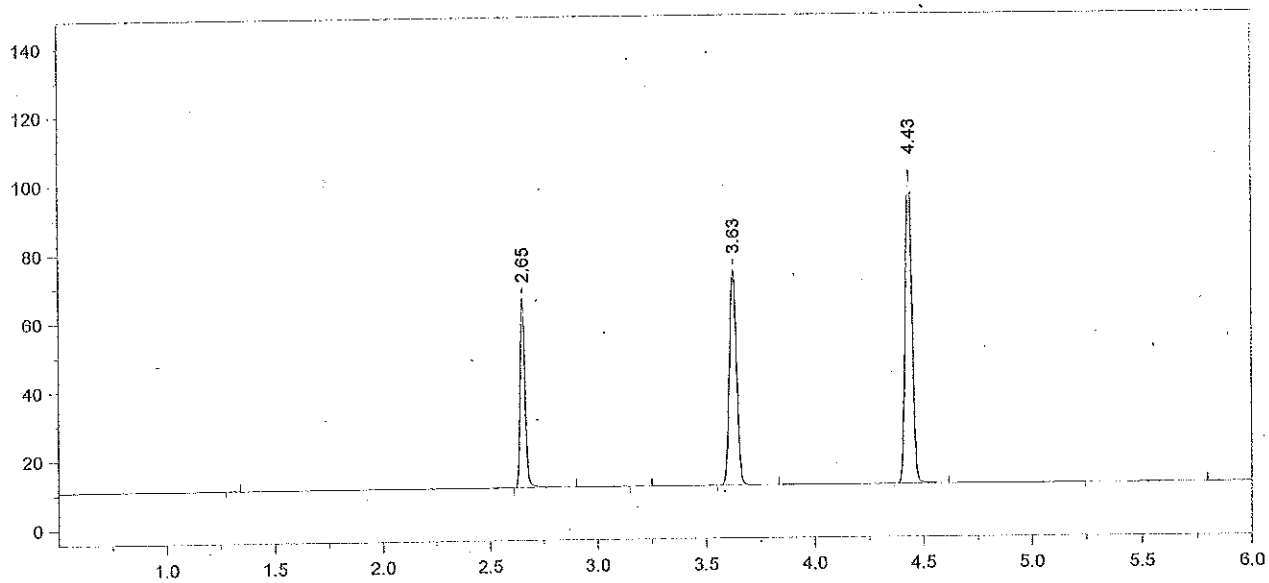
Format File Name = AlcoholVFL.FMT

Today's Date = 10/28/2013
Today's Time = 10:54:38 PM
Bound File Name = VFL10282013.0047.RAW
Sample Name = CCS
Date Taken = 10/28/2013 10:54:29 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	84271	0.0819
4	3.63	t-Butanol	146234	0.9701
5	4.43	n-Propanol	196523	1.0000

Avg vials 46 + 47 = 0.082

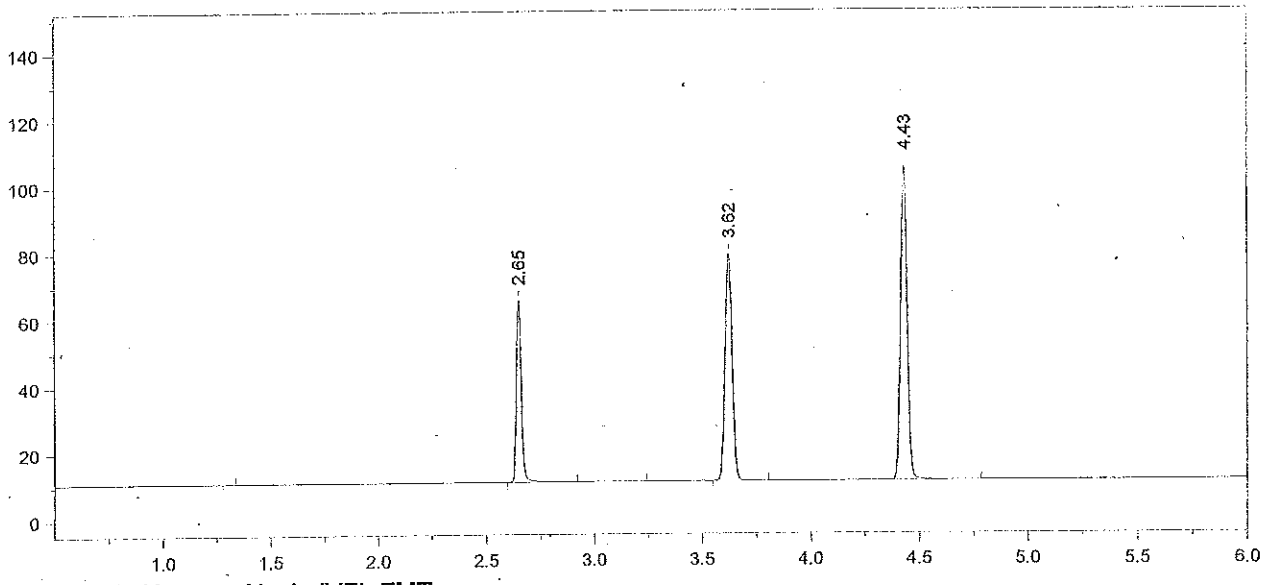
10/29/13 ALS



Format File Name = AlcoholVFL.FMT

Today's Date = 10/29/2013
Today's Time = 12:59:40 AM
Bound File Name = VFL10282013.0055.RAW
Sample Name = CCS
Date Taken = 10/29/2013 12:59:33 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	85647	0.0841
4	3.63	t-Butanol	145259	0.9736
5	4.43	n-Propanol	194513	1.0000



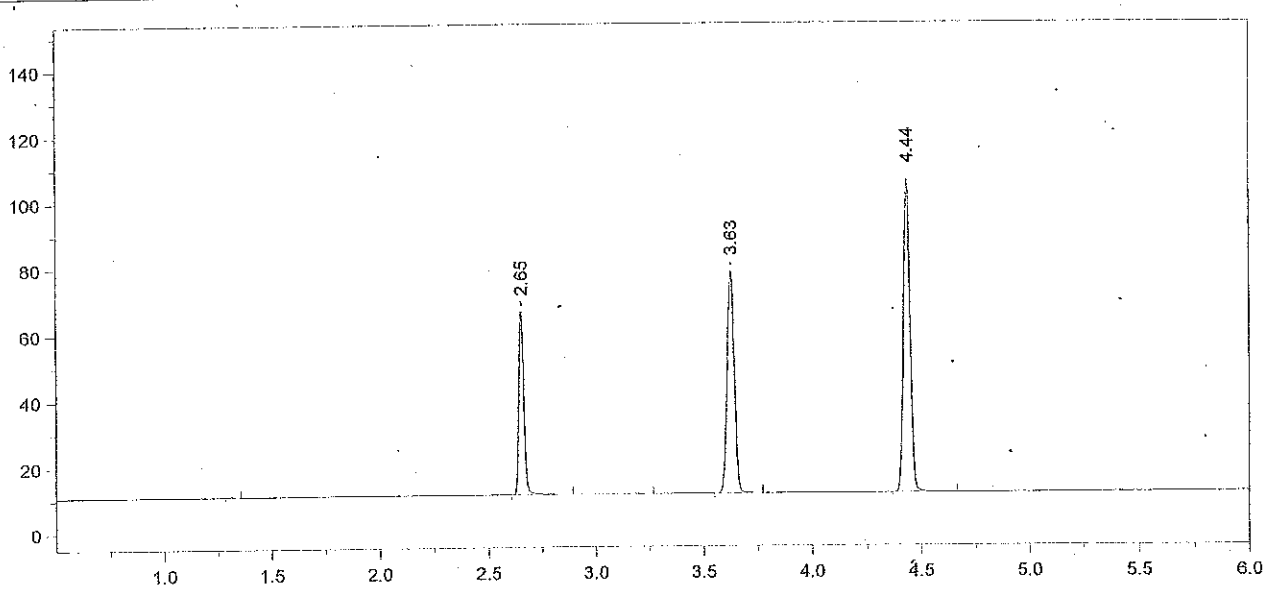
Format File Name = AlcoholVFL.FMT

Today's Date = 10/29/2013
Today's Time = 1:17:55 AM
Bound File Name = VFL10282013.0056.RAW
Sample Name = CCS
Date Taken = 10/29/2013 1:17:48 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	85182	0.0813
4	3.62	t-Butanol	157421	1.0256
5	4.43	n-Propanol	200121	1.0000

Avg vals 55 + 56 = 0.083
10/29/13
dhs

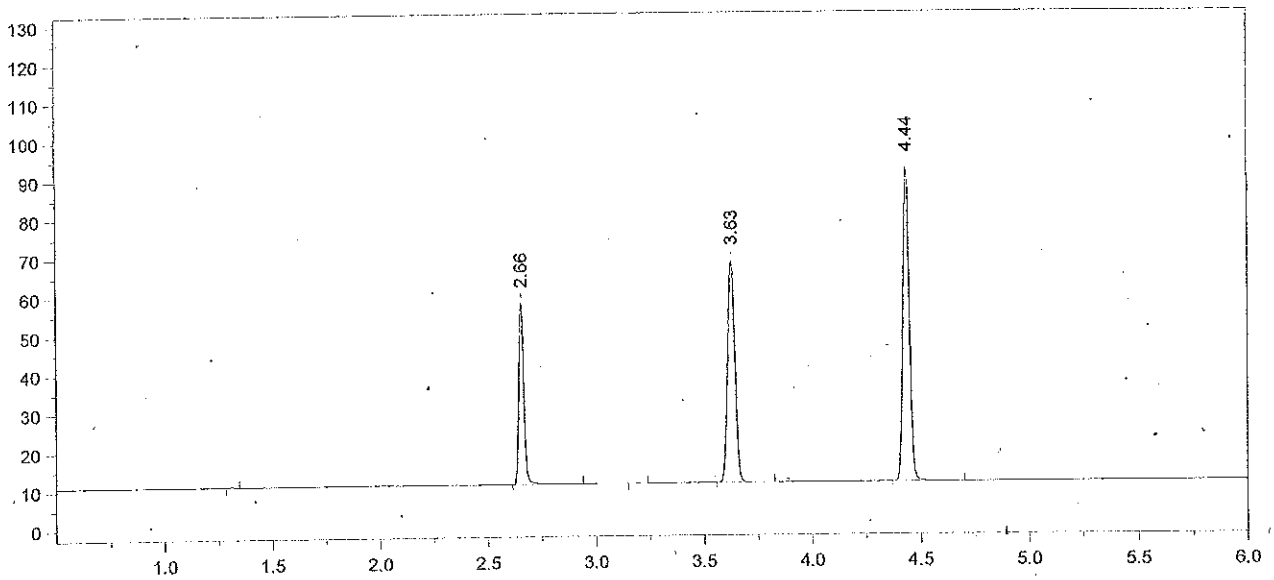
Chrom Perfect Chromatogram Report



Format File Name = AlcoholVFL.FMT

Today's Date = 10/29/2013
Today's Time = 3:20:51 AM
Bound File Name = VFL10282013.0064.RAW
Sample Name = CCS
Date Taken = 10/29/2013 3:20:42 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	87204	0.0828
4	3.63	t-Butanol	155918	1.0108
5	4.44	n-Propanol	201098	1.0000



Format File Name = AlcoholVFL.FMT

Today's Date = 10/29/2013
Today's Time = 3:35:13 AM
Bound File Name = VFL10282013.0065.RAW
Sample Name = CCS
Date Taken = 10/29/2013 3:35:05 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10282013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	74252	0.0823
4	3.63	t-Butanol	132991	1.0069
5	4.44	n-Propanol	172196	1.0000

Ag vials 64 + 65 = 0.082
10/29/13
dlb

Headspace Alcohol Analysis Standards Coversheet

Analyst: AEB Date: 11/1/13

11/4/2013

Calibration Standards:

Lot ID: ES-09262013 Preparation Date: 09/26/2013 Expiration Date: 12/26/2013

	Standard A	Standard B	Standard C	Standard D	Standard E	Calibration Check
% Ethanol (w/v)	0.006	0.025	0.082	0.201	0.411	0.082
Acceptance Range (± 10%)	0.007	0.028	0.090	0.221	0.452	0.090
	0.005	0.023	0.074	0.181	0.370	0.074

Control Sample:

Sample	Source	Lot number	Target Value	Acceptance Range	
Aqueous	Cerilliant	FN021111-03	0.080	0.072	0.088

Calibration and Control Sample Data:

Vial No.	Sample Identification		Result	In Range?	Comments
1	Blank		<0.005	Y N	
2	Compound Retention Times:			N/A	
		Acetaldehyde	1.91		
		Methanol	2.01		
		Ethanol	2.65		
		Acetone	3.05		
		Isopropanol	3.19		
		T- butanol	3.62		
		n-propanol	4.43		
3	Standard A		0.006	Y N	
4	Standard B		0.024	Y N	
5	Standard C		0.080	Y N	
6	Standard D		0.200	Y N	
7	Standard E		0.412	Y N	
8	Aqueous QC		~~0.0799~~ 0.080 11/1/13	Y N	
9	Aqueous QC		0.0818	Y N	$\bar{X}$ = 0.081 101%

13-19-100 43

File Name = C:\Alcohol Data\VFL10312013\VFL10312013.SEQ
Version = 1
File Date = 10/31/2013 1:43:12 PM

Entry #	Raw File Name	Method File Name	Sample Name	Sample Wt.	Int. Std. Amount
1	VFL10312013.0001.raw	Blood Alc temp VFL.MET	Blank	1.00	1.00
2	VFL10312013.0002.raw	Blood Alc temp VFL.MET	TMX	1.00	1.00
3	VFL10312013.0003.raw	Blood Alc temp VFL.MET	STD A	1.00	1.00
4	VFL10312013.0004.raw	Blood Alc temp VFL.MET	STD B	1.00	1.00
5	VFL10312013.0005.raw	Blood Alc temp VFL.MET	STD C	1.00	1.00
6	VFL10312013.0006.raw	Blood Alc temp VFL.MET	STD D	1.00	1.00
7	VFL10312013.0007.raw	Blood Alc temp VFL.MET	STD E	1.00	1.00
8	VFL10312013.0008.raw	Blood Alc temp VFL.MET	AQ QC	1.00	1.00
9	VFL10312013.0009.raw	Blood Alc temp VFL.MET	AQ QC	1.00	1.00
10	VFL10312013.0010.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
11	VFL10312013.0011.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
12	VFL10312013.0012.raw	simsoln.met	0.08 ALB	1.00	1.00
13	VFL10312013.0013.raw	simsoln.met	0.08 ALB	1.00	1.00
14	VFL10312013.0014.raw	simsoln.met	0.08 ALB	1.00	1.00
15	VFL10312013.0015.raw	simsoln.met	0.08 ALB	1.00	1.00
16	VFL10312013.0016.raw	simsoln.met	0.08 ALB	1.00	1.00
17	VFL10312013.0017.raw	simsoln.met	0.08 ALB	1.00	1.00
18	VFL10312013.0018.raw	simsoln.met	0.08 ALB	1.00	1.00
19	VFL10312013.0019.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
20	VFL10312013.0020.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
21	VFL10312013.0021.raw	simsoln.met	0.08 RLM	1.00	1.00
22	VFL10312013.0022.raw	simsoln.met	0.08 RLM	1.00	1.00
23	VFL10312013.0023.raw	simsoln.met	0.08 RLM	1.00	1.00
24	VFL10312013.0024.raw	simsoln.met	0.08 RLM	1.00	1.00
25	VFL10312013.0025.raw	simsoln.met	0.08 RLM	1.00	1.00
26	VFL10312013.0026.raw	simsoln.met	0.08 RLM	1.00	1.00
27	VFL10312013.0027.raw	simsoln.met	0.08 RLM	1.00	1.00
28	VFL10312013.0028.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
29	VFL10312013.0029.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
30	VFL10312013.0030.raw	simsoln.met	0.10 ALB	1.00	1.00
31	VFL10312013.0031.raw	simsoln.met	0.10 ALB	1.00	1.00
32	VFL10312013.0032.raw	simsoln.met	0.10 ALB	1.00	1.00
33	VFL10312013.0033.raw	simsoln.met	0.10 ALB	1.00	1.00
34	VFL10312013.0034.raw	simsoln.met	0.10 ALB	1.00	1.00
35	VFL10312013.0035.raw	simsoln.met	0.10 ALB	1.00	1.00
36	VFL10312013.0036.raw	simsoln.met	0.10 ALB	1.00	1.00
37	VFL10312013.0037.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
38	VFL10312013.0038.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
39	VFL10312013.0039.raw	simsoln.met	0.10 RLM	1.00	1.00
40	VFL10312013.0040.raw	simsoln.met	0.10 RLM	1.00	1.00
41	VFL10312013.0041.raw	simsoln.met	0.10 RLM	1.00	1.00
42	VFL10312013.0042.raw	simsoln.met	0.10 RLM	1.00	1.00
43	VFL10312013.0043.raw	simsoln.met	0.10 RLM	1.00	1.00
44	VFL10312013.0044.raw	simsoln.met	0.10 RLM	1.00	1.00
45	VFL10312013.0045.raw	simsoln.met	0.10 RLM	1.00	1.00
46	VFL10312013.0046.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
47	VFL10312013.0047.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
48	VFL10312013.0048.raw	simsoln.met	0.40 ALB	1.00	1.00
49	VFL10312013.0049.raw	simsoln.met	0.40 ALB	1.00	1.00
50	VFL10312013.0050.raw	simsoln.met	0.40 ALB	1.00	1.00
51	VFL10312013.0051.raw	simsoln.met	0.40 ALB	1.00	1.00
52	VFL10312013.0052.raw	simsoln.met	0.40 ALB	1.00	1.00
53	VFL10312013.0053.raw	simsoln.met	0.40 ALB	1.00	1.00
54	VFL10312013.0054.raw	simsoln.met	0.40 ALB	1.00	1.00
55	VFL10312013.0055.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
56	VFL10312013.0056.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
57	VFL10312013.0057.raw	simsoln.met	0.40 RLM	1.00	1.00
58	VFL10312013.0058.raw	simsoln.met	0.40 RLM	1.00	1.00
59	VFL10312013.0059.raw	simsoln.met	0.40 RLM	1.00	1.00
60	VFL10312013.0060.raw	simsoln.met	0.40 RLM	1.00	1.00
61	VFL10312013.0061.raw	simsoln.met	0.40 RLM	1.00	1.00
62	VFL10312013.0062.raw	simsoln.met	0.40 RLM	1.00	1.00

Entry #	Raw File Name	Method File Name	Sample Name	Sample Wt.	Int. Std. Amount
63	VFL10312013.0063.raw	simsoln.met	0.40 RLM	1.00	1.00
64	VFL10312013.0064.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
65	VFL10312013.0065.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00

13-19-140 45 8416

File Name: C:\Methods\VFL10312013.CAL
Version: 7

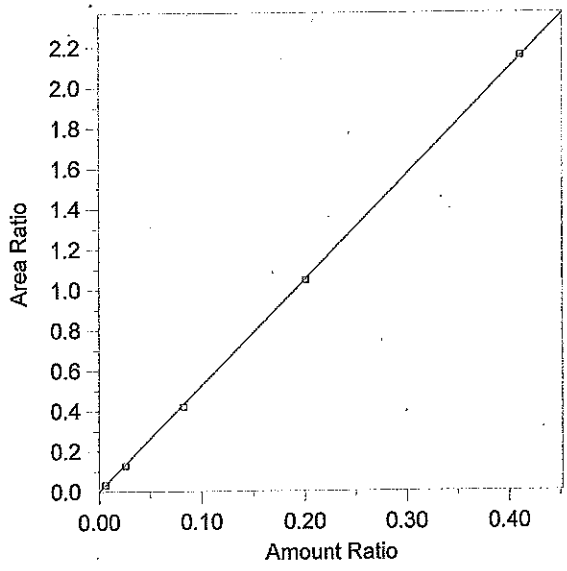
Creator:
Description:
Reason for change:

Internal standard calibration
No injection volume correction
No sample weight correction
Area reject threshold: 1500
Reference peak area reject threshold: 0
Amount units:
No default component

Method of calculating data point averages: Equal weight for all updates
No calibration update report

All levels are normal data points.

3 Ethanol



Expected retention time: 2.656 minutes
Search window: 0.1 minutes
Internal standard component: 7 (n-Propanol)
No retention time reference component
Group number: 0

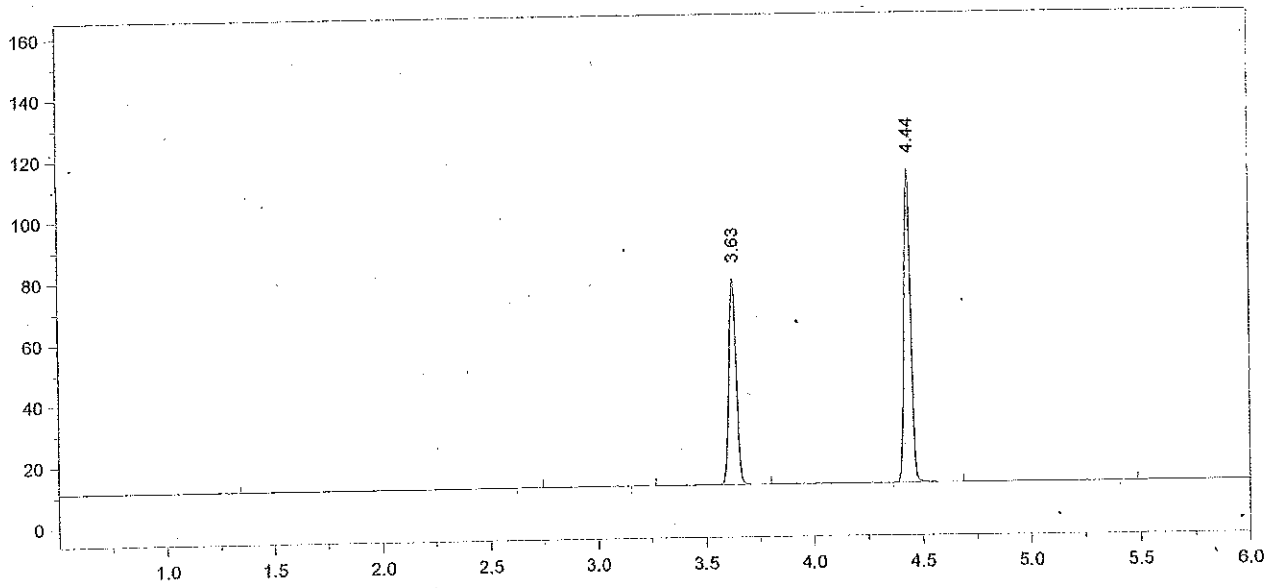
High alarm limit: 0
Low alarm limit: 0
Component constant: 0

Single peak quantification by area

$Y = 5.224923\ X + 0$

Linear fit with equal weighting, forced to origin
Coefficient of determination: 0.999931
Average error: 2.021%
Average CF: 5.173039
RSD: 2.643%

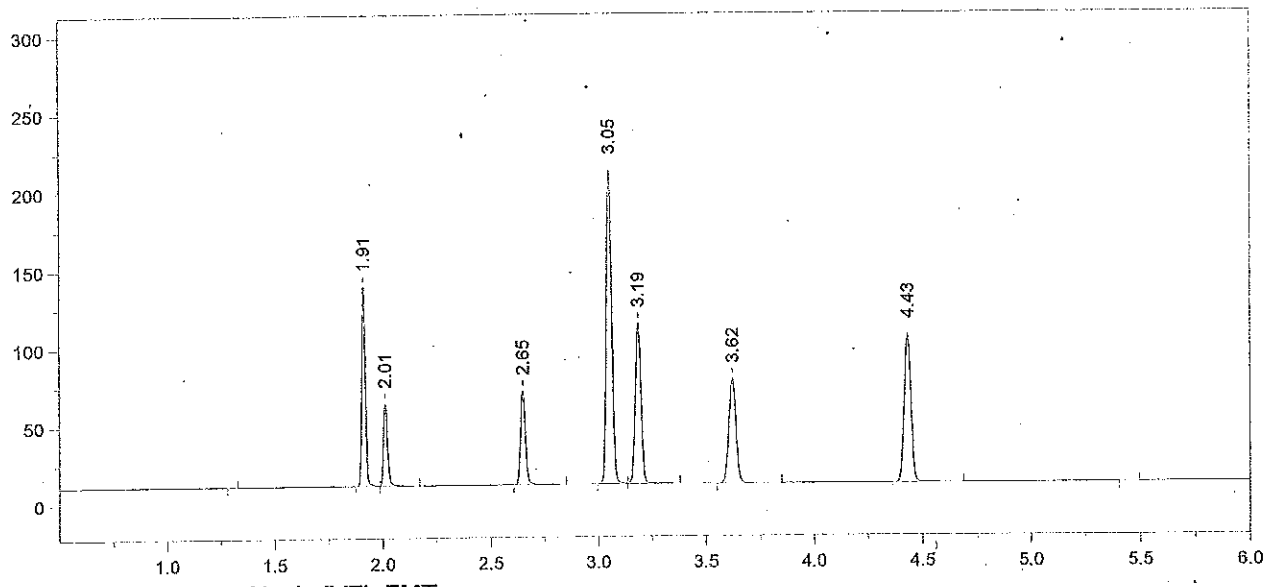
Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source	Date and time
1	(0.091)	(85146)	--	--	0.091	85146	Manual	8/12/2013 4:03:34 PM
2	0.0063	6694.642	1062642	2.334	0.0063	3.368535E-02	C:\Alcohol Data\VFL10312013\VFL10312013.0003.BND	10/31/2013 2:48:25 PM
3	0.0254	26742.49	1052854	-4.457	0.0254	0.1267985	C:\Alcohol Data\VFL10312013\VFL10312013.0004.BND	10/31/2013 3:05:58 PM
4	0.0822	86341.52	1050384	-2.591	0.0822	0.418359	C:\Alcohol Data\VFL10312013\VFL10312013.0005.BND	10/31/2013 3:19:12 PM
5	0.2012	221129	1099051	-0.488	0.2012	1.046124	C:\Alcohol Data\VFL10312013\VFL10312013.0006.BND	10/31/2013 3:35:41 PM
6	0.4112	433627.9	1054543	0.237	0.4112	2.153577	C:\Alcohol Data\VFL10312013\VFL10312013.0007.BND	10/31/2013 3:50:35 PM



Format File Name = AlcoholVFL.FMT

Today's Date = 11/1/2013
Today's Time = 8:21:07 AM
Bound File Name = VFL10312013.0001.RAW
Sample Name = Blank
Date Taken = 10/31/2013 2:17:00 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
4	3.63	t-Butanol	155917	0.9550
5	4.44	n-Propanol	217916	1.0000

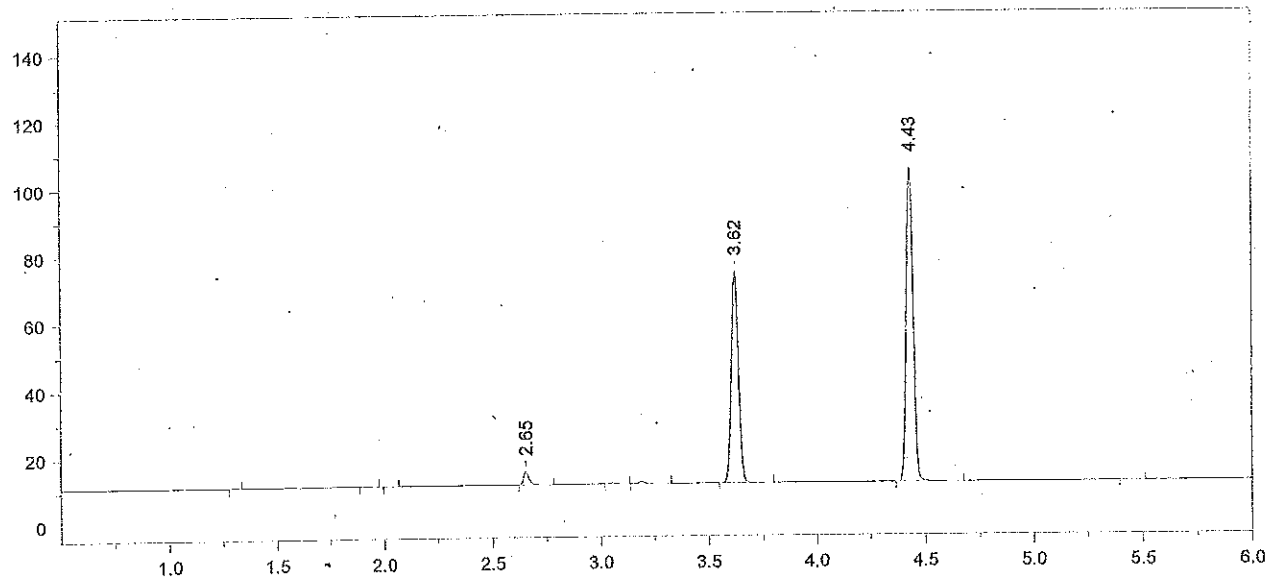


Format File Name = AlcoholVFL.FMT

Today's Date = 11/1/2013
Today's Time = 8:21:18 AM
Bound File Name = VFL10312013.0002.RAW
Sample Name = TMX
Date Taken = 10/31/2013 2:34:26 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	1.91	Acetaldehyde	151608	0.0520
3	2.01	Methanol	67699	0.1370
4	2.65	Ethanol	94124	0.0893
5	3.05	Acetone	345504	0.0940
6	3.19	Isopropanol	193668	0.0850
7	3.62	t-Butanol	155058	1.0260
8	4.43	n-Propanol	201723	1.0000

Chrom Perfect Chromatogram Report

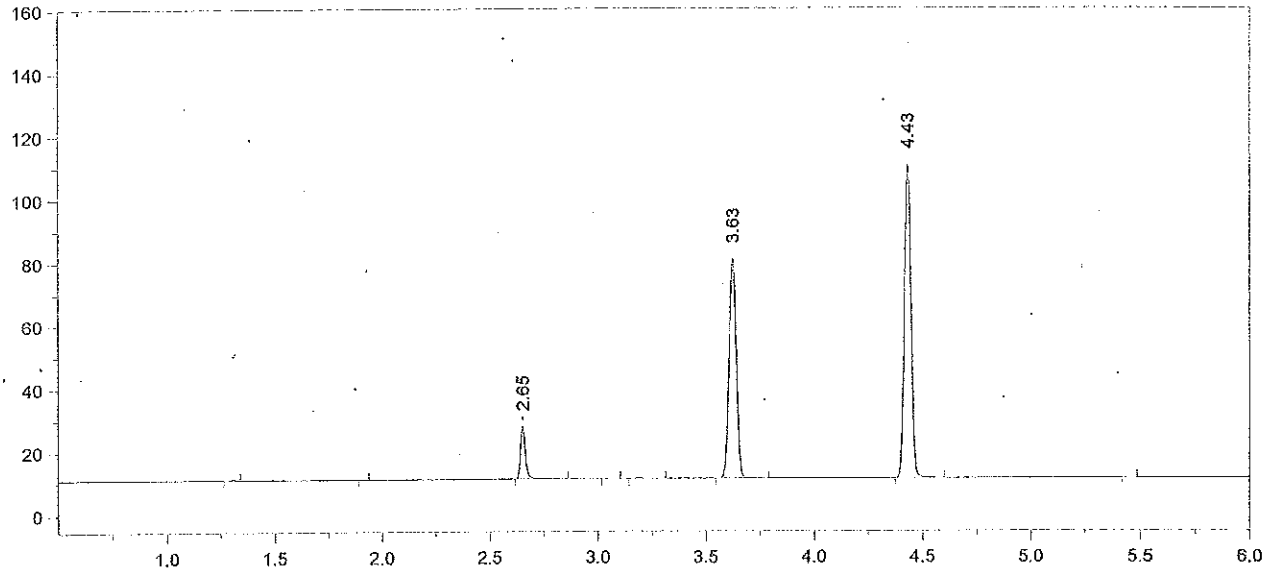


Format File Name = AlcoholVFL.FMT

Today's Date = 11/1/2013
Today's Time = 8:21:25 AM
Bound File Name = VFL10312013.0003.RAW
Sample Name = STD A
Date Taken = 10/31/2013 2:48:14 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
4	2.65	Ethanol	06695	0.0064
7	3.62	t-Butanol	145520	0.9773
8	4.43	n-Propanol	198741	1.0000

11/1/13
tan

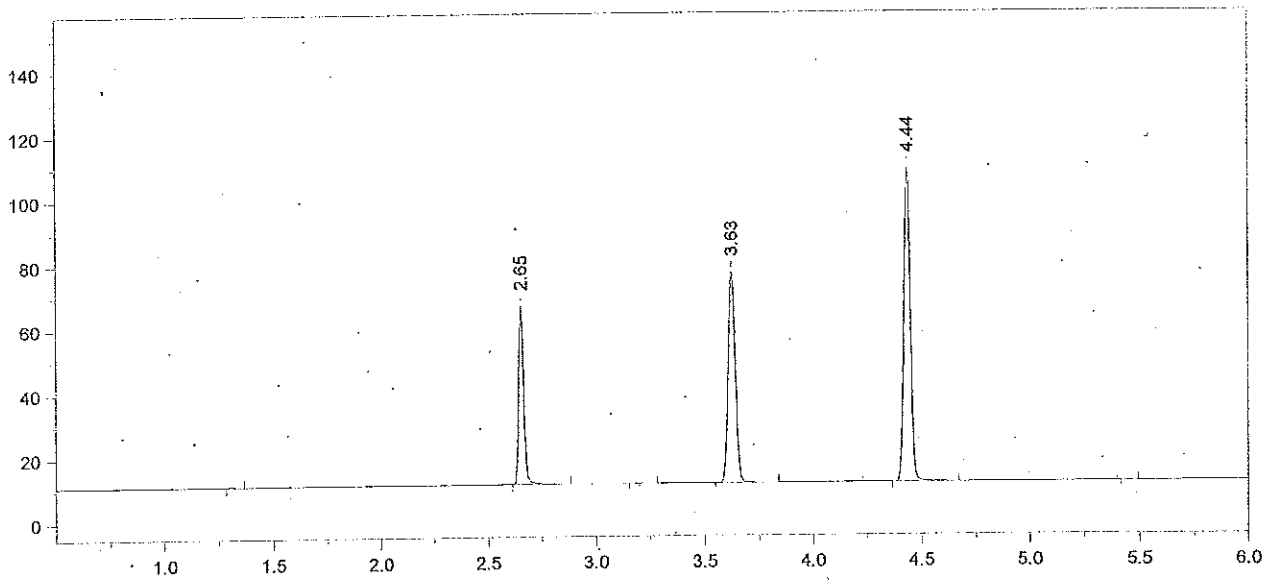


Format File Name = AlcoholVFL.FMT

Today's Date = 11/1/2013
Today's Time = 8:21:31 AM
Bound File Name = VFL10312013.0004.RAW
Sample Name = STD B
Date Taken = 10/31/2013 3:05:50 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	26742	0.0243
6	3.63	t-Butanol	161769	1.0238
7	4.43	n-Propanol	210906	1.0000

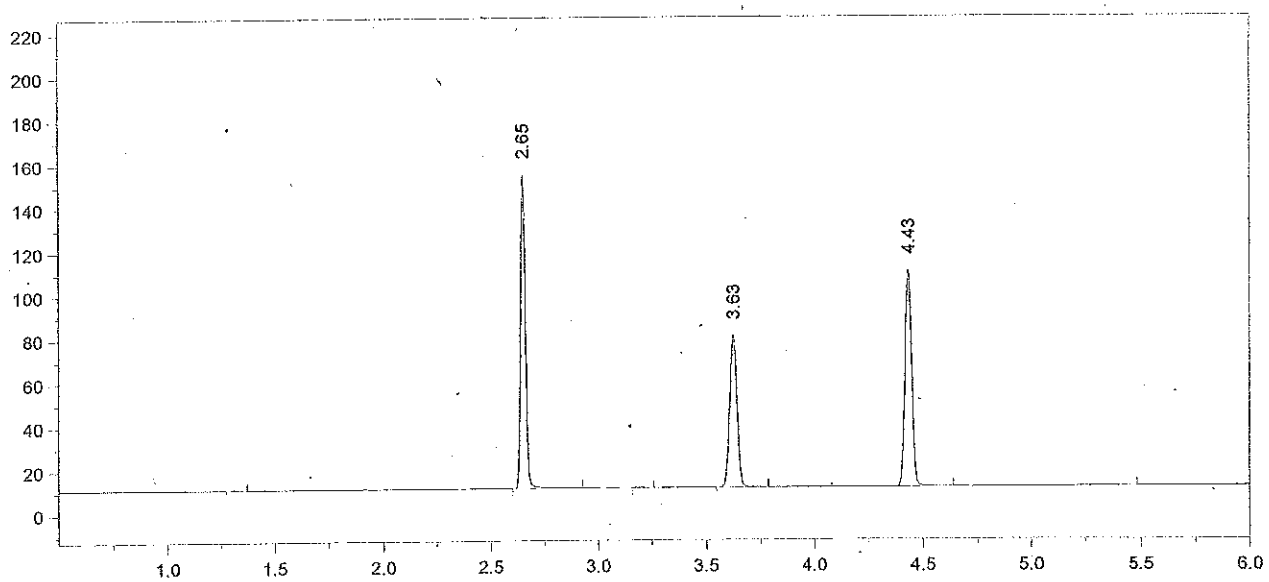
13-19-100 50



Format File Name = AlcoholVFL.FMT

Today's Date = 11/1/2013
Today's Time = 8:21:38 AM
Bound File Name = VFL10312013.0005.RAW
Sample Name = STD C
Date Taken = 10/31/2013 3:19:04 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	86342	0.0801
4	3.63	t-Butanol	151807	0.9818
5	4.44	n-Propanol	206381	1.0000

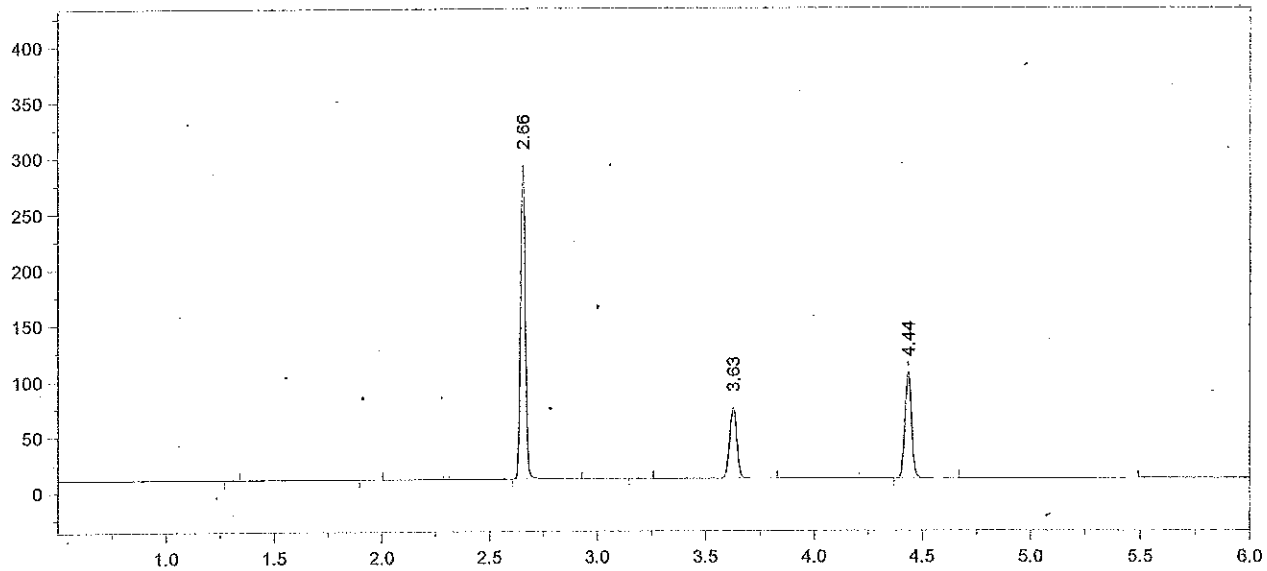


Format File Name = AlcoholVFL.FMT

Today's Date = 11/1/2013
Today's Time = 8:21:43 AM
Bound File Name = VFL10312013.0006.RAW
Sample Name = STD D
Date Taken = 10/31/2013 3:35:34 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	221129	0.2002
4	3.63	t-Butanol	161005	1.0167
5	4.43	n-Propanol	211379	1.0000

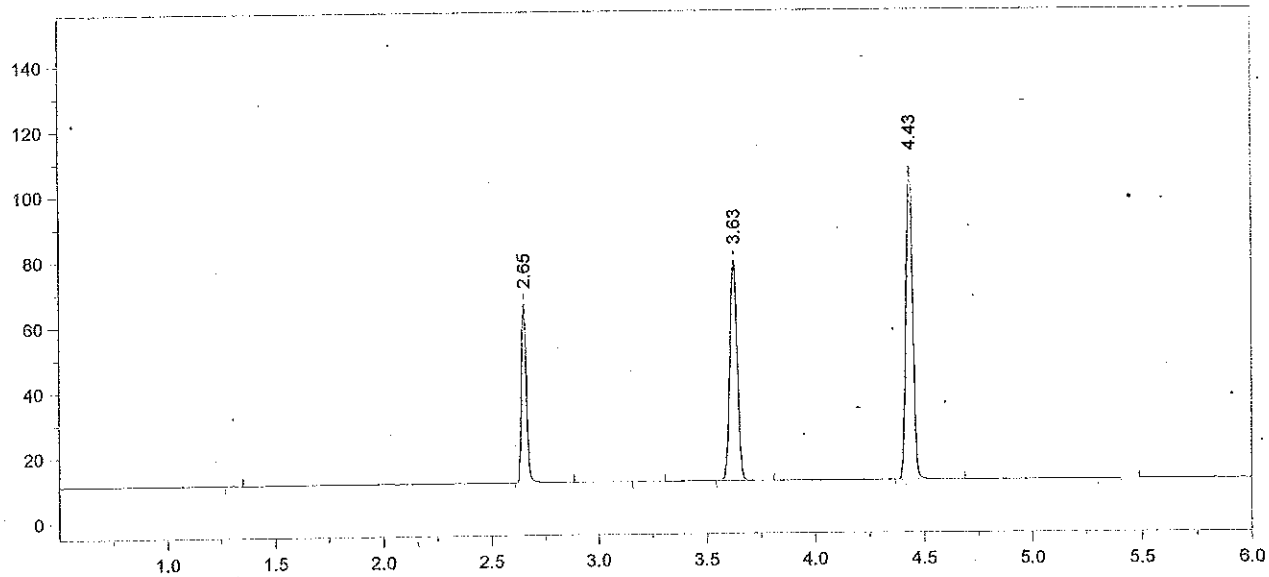
13-19-100



Format File Name = AlcoholVFL.FMT

Today's Date = 11/1/2013
Today's Time = 8:21:50 AM
Bound File Name = VFL10312013.0007.RAW
Sample Name = STD E
Date Taken = 10/31/2013 3:50:25 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.66	Ethanol	433628	0.4122
5	3.63	t-Butanol	146993	0.9744
6	4.44	n-Propanol	201352	1.0000

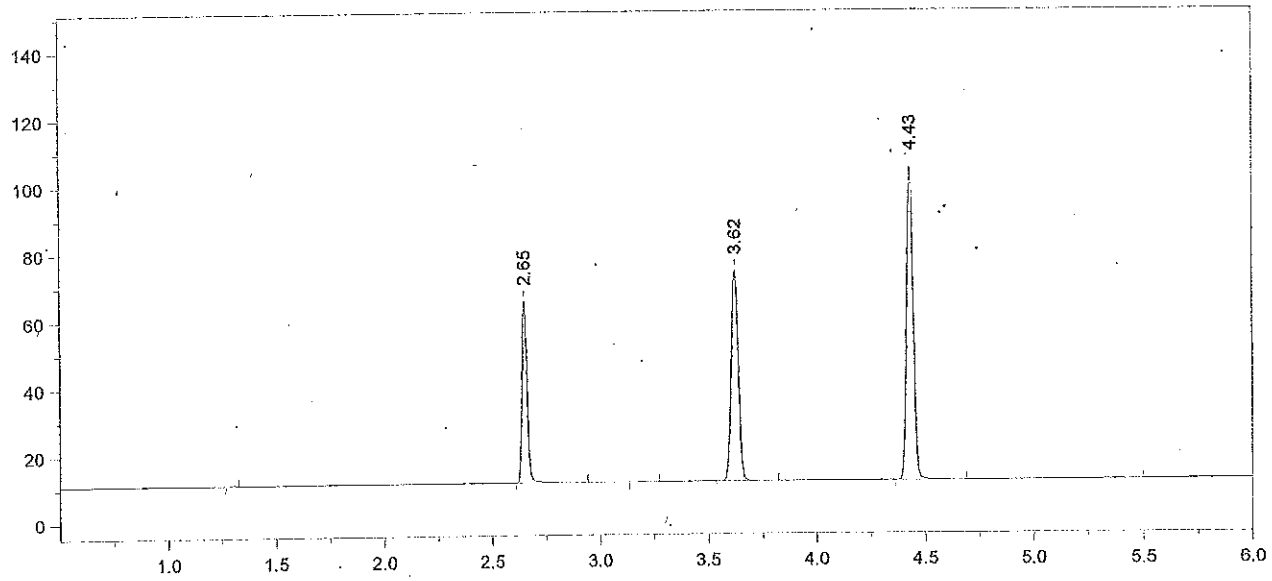


Format File Name = AlcoholVFL.FMT

Today's Date = 10/31/2013
Today's Time = 4:07:14 PM
Bound File Name = VFL10312013.0008.RAW
Sample Name = AQ QC
Date Taken = 10/31/2013 4:07:04 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	85617	0.0799
4	3.63	t-Butanol	156220	1.0173
5	4.43	n-Propanol	204963	1.0000

13-19-100 54 .08 .13



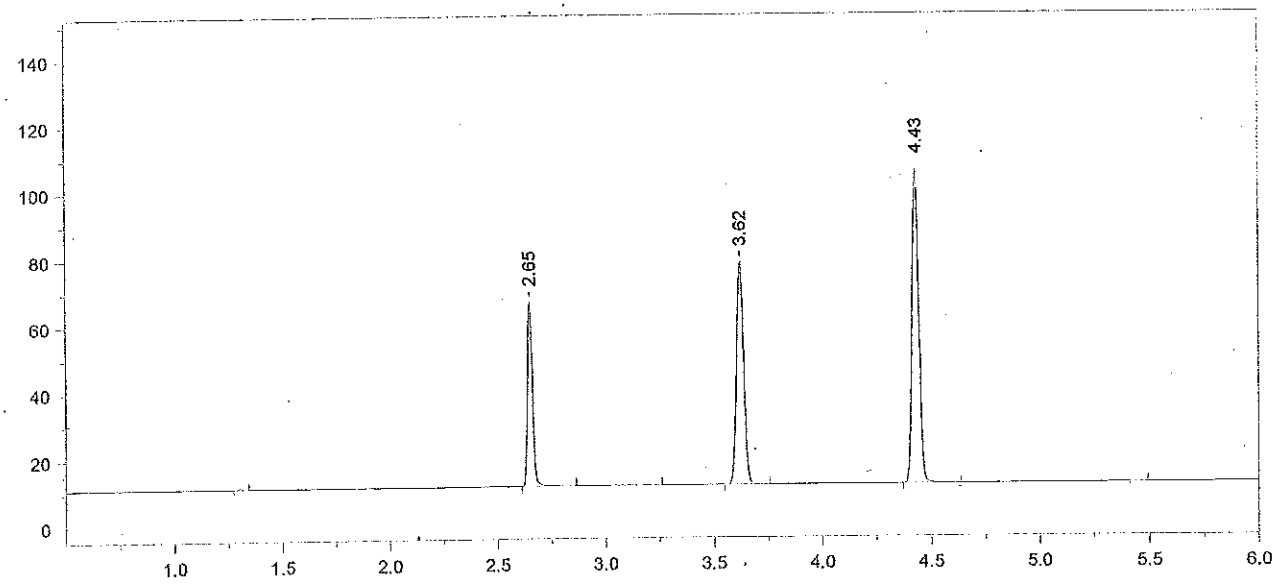
Format File Name = AlcoholVFL.FMT

Today's Date = 10/31/2013
Today's Time = 4:21:05 PM
Bound File Name = VFL10312013.0009.RAW
Sample Name = AQ QC
Date Taken = 10/31/2013 4:20:54 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	84679	0.0818
4	3.62	t-Butanol	145404	0.9801
5	4.43	n-Propanol	198017	1.0000

Avg vials 8+9 = 0.081 101%

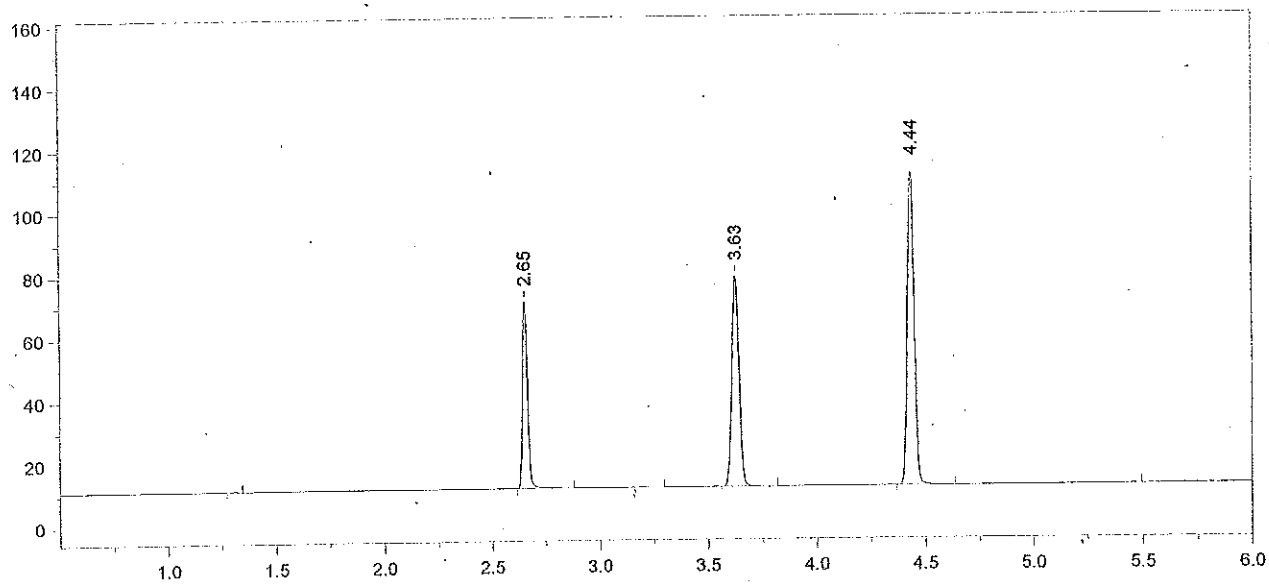
11/1/13 dcs



Format File Name = AlcoholVFL.FMT

Today's Date = 10/31/2013
Today's Time = 4:38:38 PM
Bound File Name = VFL10312013.0010.RAW
Sample Name = CCS
Date Taken = 10/31/2013 4:38:31 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	85793	0.0822
4	3.62	t-Butanol	154513	1.0328
5	4.43	n-Propanol	199690	1.0000

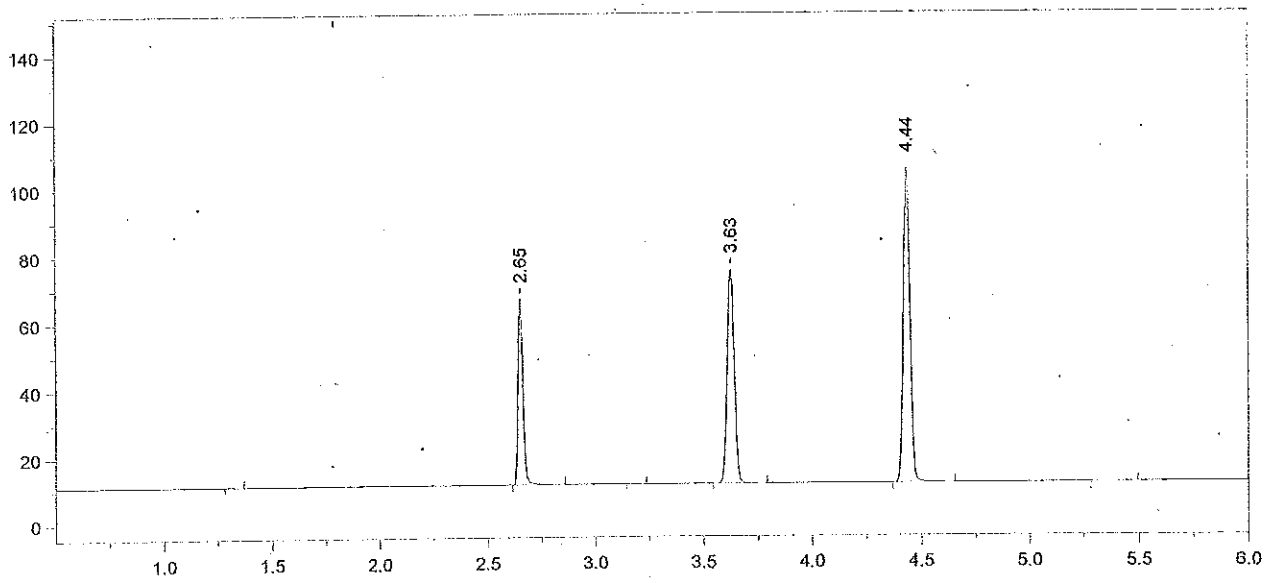


Format File Name = AlcoholVFL.FMT

Today's Date = 10/31/2013
Today's Time = 4:51:58 PM
Bound File Name = VFL10312013.0011.RAW
Sample Name = CCS
Date Taken = 10/31/2013 4:51:49 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	92669	0.0834
4	3.63	t-Butanol	155598	0.9766
5	4.44	n-Propanol	212657	1.0000

Avg vials 10 + 11 = 0.083
11/1/13 [illegible]

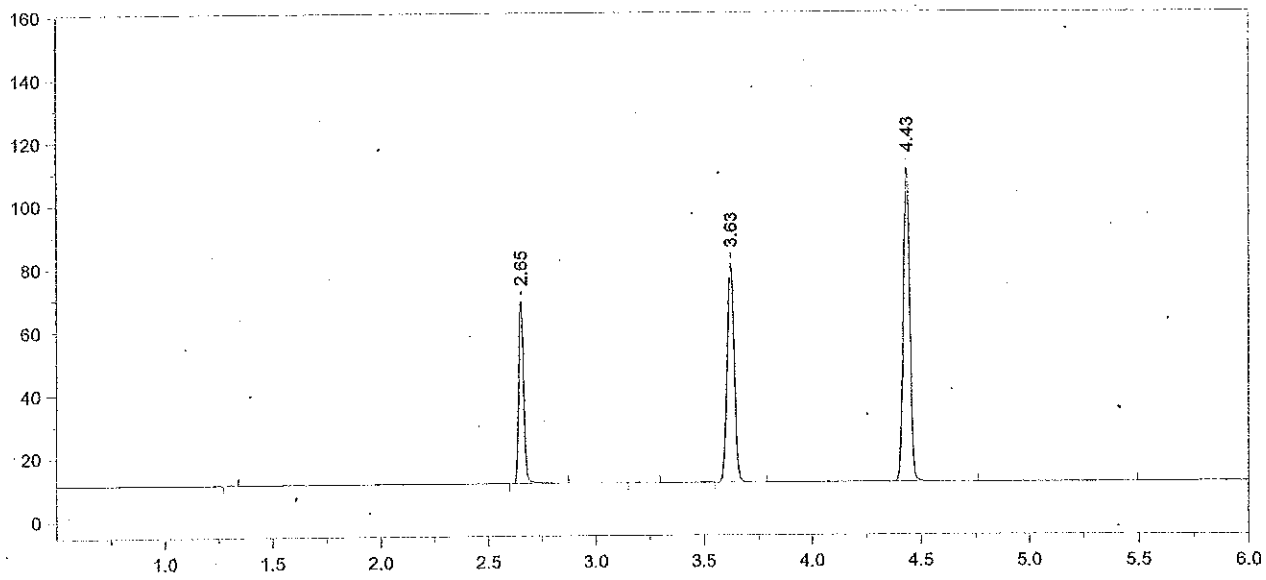


Format File Name = AlcoholVFL.FMT

Today's Date = 10/31/2013
Today's Time = 6:54:38 PM
Bound File Name = VFL10312013.0019.RAW
Sample Name = CCS
Date Taken = 10/31/2013 6:54:33 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	86447	0.0825
4	3.63	t-Butanol	147699	0.9831
5	4.44	n-Propanol	200537	1.0000

13-19-100 58

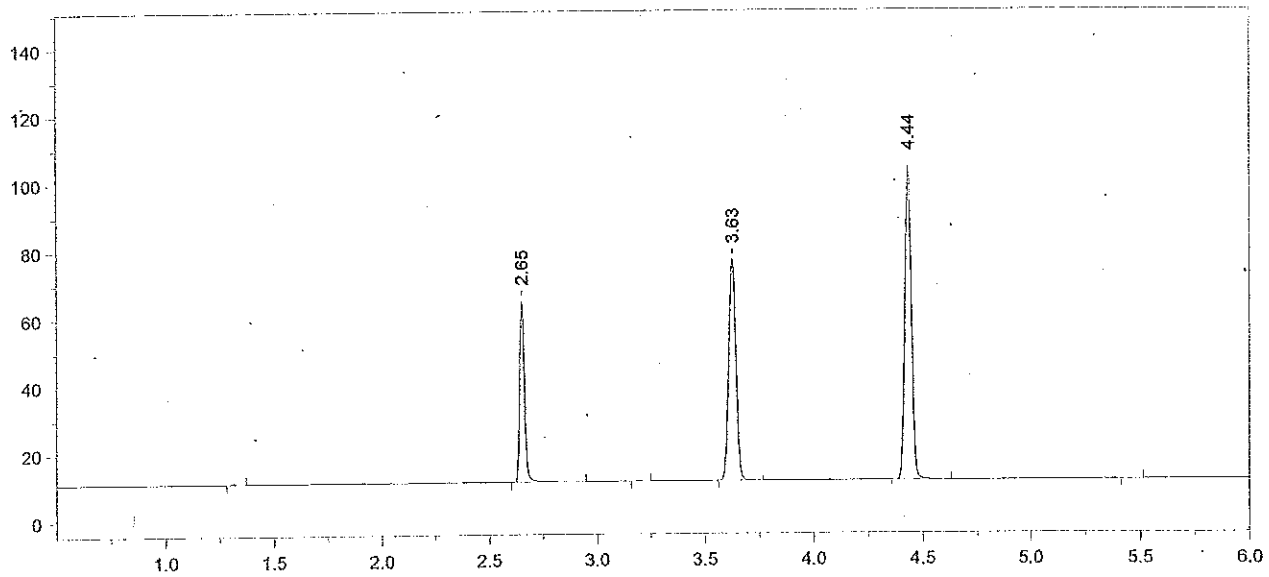


Format File Name = AlcoholVFL.FMT

Today's Date = 10/31/2013
Today's Time = 7:10:15 PM
Bound File Name = VFL10312013.0020.RAW
Sample Name = CCS
Date Taken = 10/31/2013 7:10:06 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	90823	0.0823
4	3.63	t-Butanol	161146	1.0182
5	4.43	n-Propanol	211256	1.0000

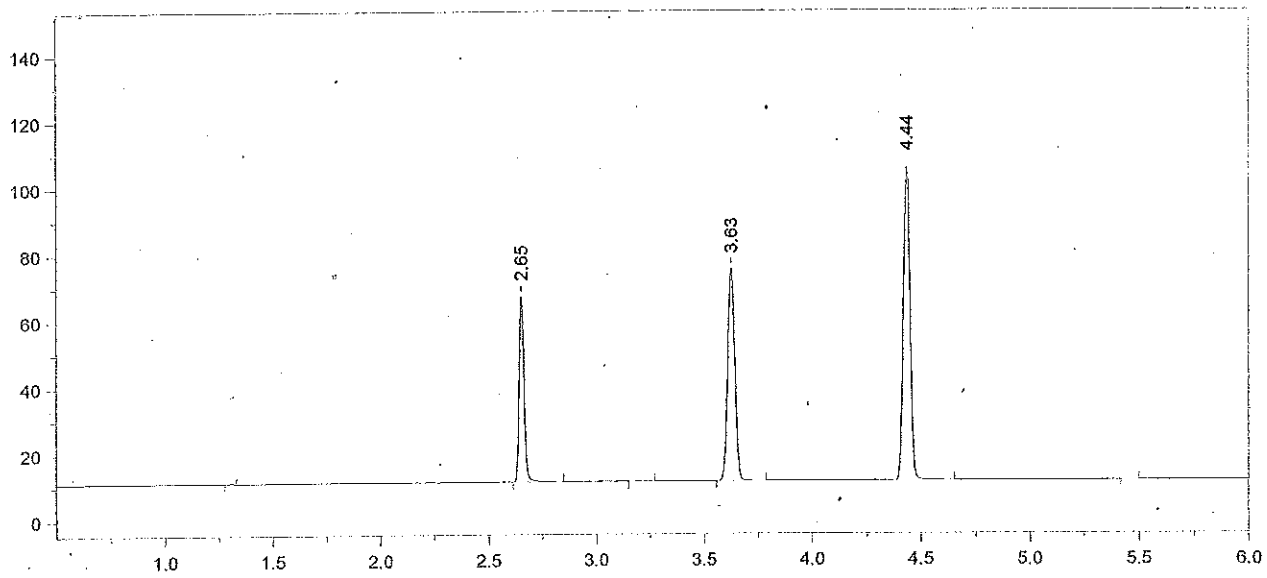
Avg vals 19+20 = 0.082
11/1/13 dms



Format File Name = AlcoholVFL.FMT

Today's Date = 10/31/2013
Today's Time = 9:14:23 PM
Bound File Name = VFL10312013.0028.RAW
Sample Name = CCS
Date Taken = 10/31/2013 9:14:16 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	83969	0.0816
4	3.63	t-Butanol	151553	1.0276
5	4.44	n-Propanol	196858	1.0000

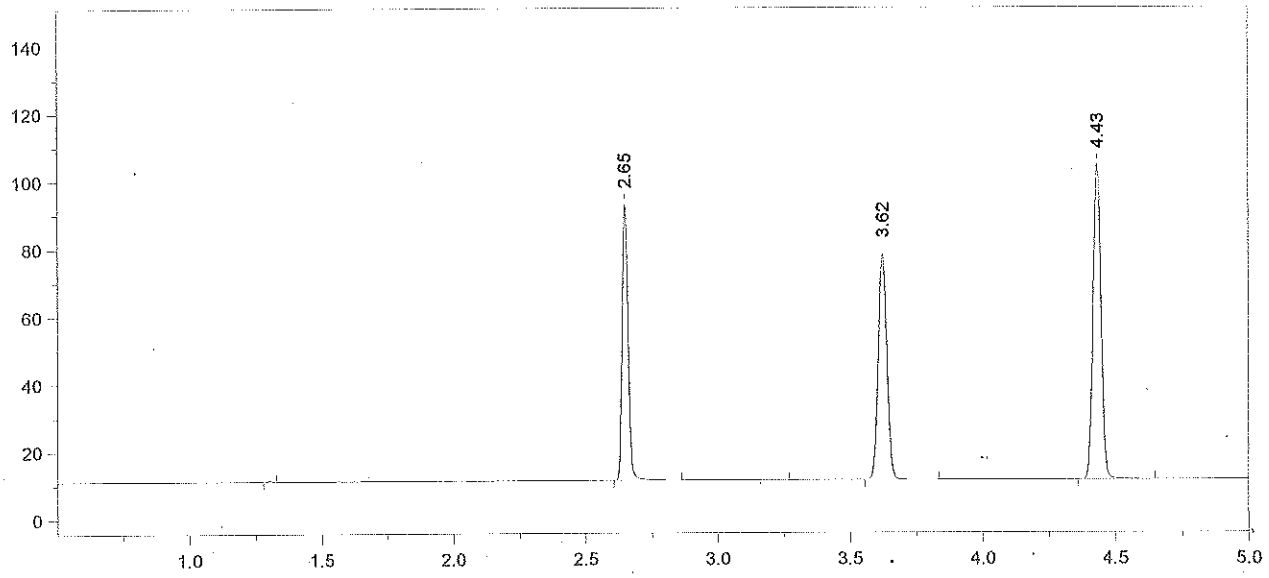


Format File Name = AlcoholVFL.FMT

Today's Date = 10/31/2013
Today's Time = 9:28:11 PM
Bound File Name = VFL10312013.0029.RAW
Sample Name = CCS
Date Taken = 10/31/2013 9:28:04 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	86919	0.0826
4	3.63	t-Butanol	147864	0.9805
5	4.44	n-Propanol	201283	1.0000

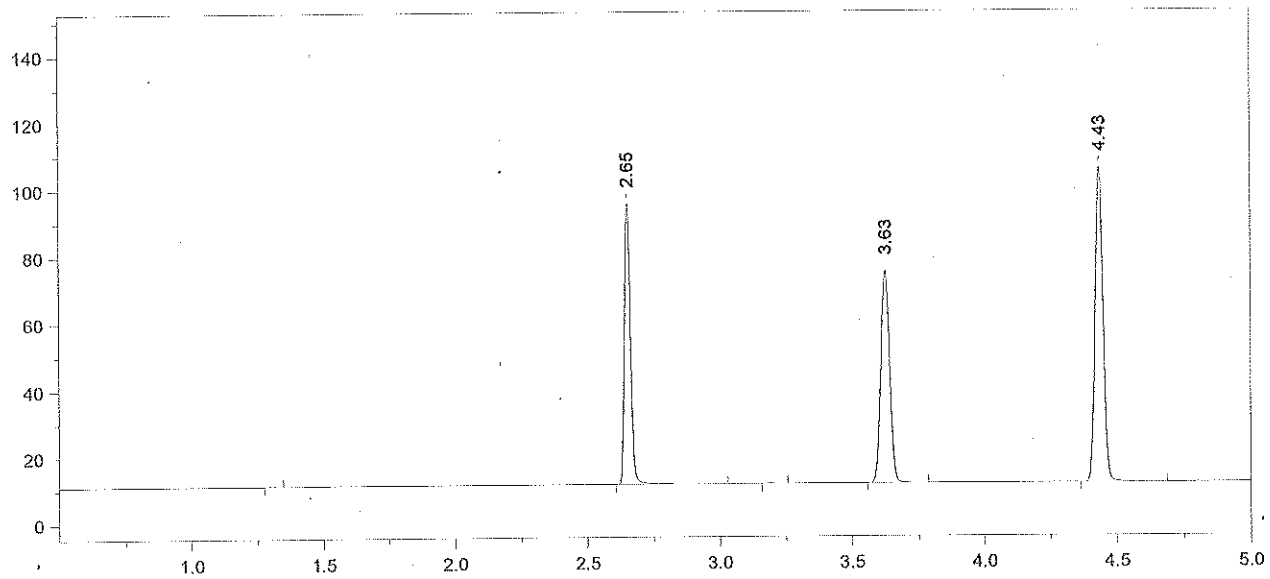
Avg vals 28+ 29 = 0.082
11/1/13



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/31/2013 Today's Time = 9:45:52 PM
Bound File Name = VFL10312013.0030.RAW
Sample Name = 0.10 ALB
Date Taken = 10/31/2013 9:45:43 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10312013.CAL Calibration Version = 7

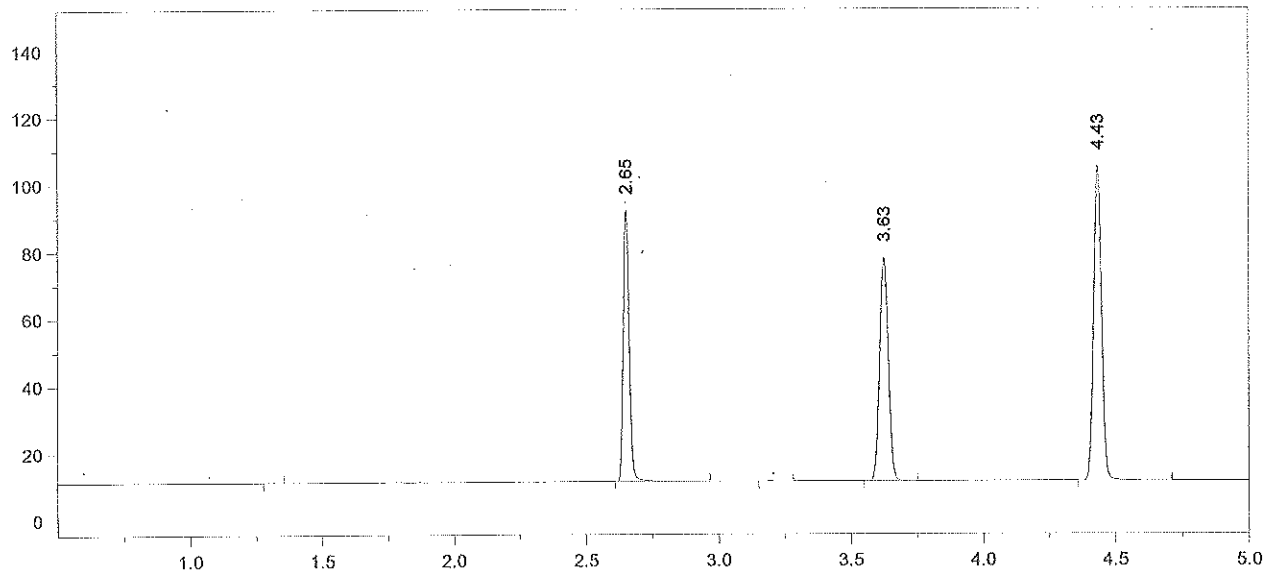
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	126016	0.1211	0.0988
4	3.62	t-Butanol	154965	1.0384	0.8475
5	4.43	n-Propanol	199197	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/31/2013
Today's Time = 9:59:56 PM
Bound File Name = VFL10312013.0031.RAW
Sample Name = 0.10 ALB
Date Taken = 10/31/2013 9:59:46 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10312013.CAL
Calibration Version = 7

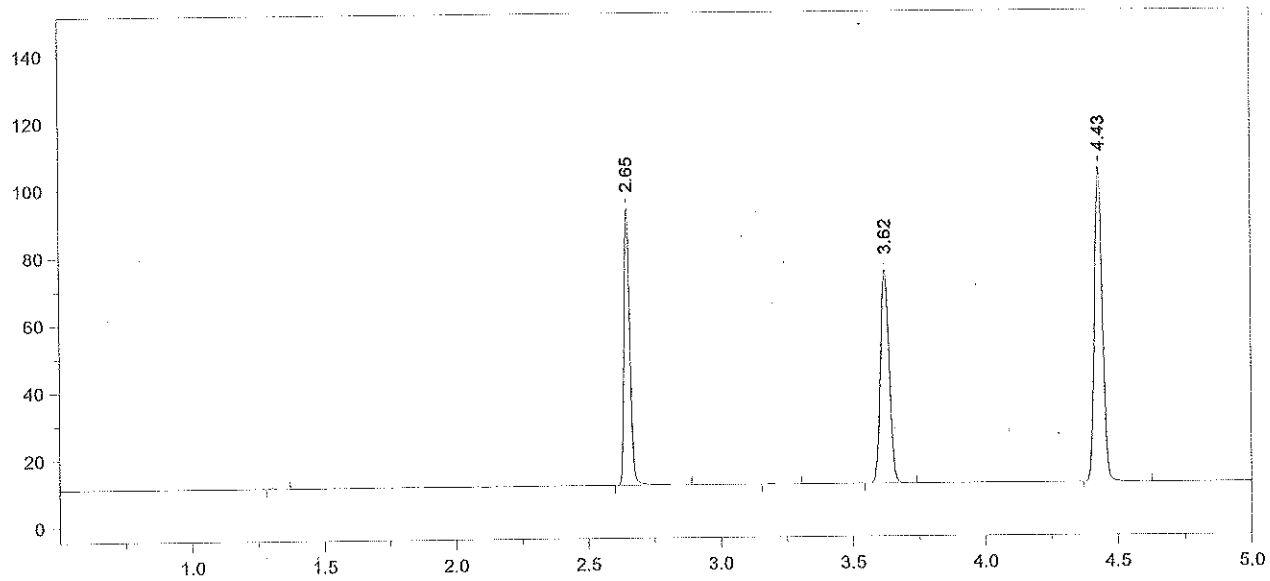
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	131918	0.1261	0.1029
4	3.63	t-Butanol	147433	0.9828	0.8022
5	4.43	n-Propanol	200234	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/31/2013
Today's Time = 10:17:23 PM
Bound File Name = VFL10312013.0032.RAW
Sample Name = 0.10 ALB
Date Taken = 10/31/2013 10:17:12 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	126140	0.1216	0.0992
4	3.63	t-Butanol	154247	1.0368	0.8463
5	4.43	n-Propanol	198569	1.0000	0.8162

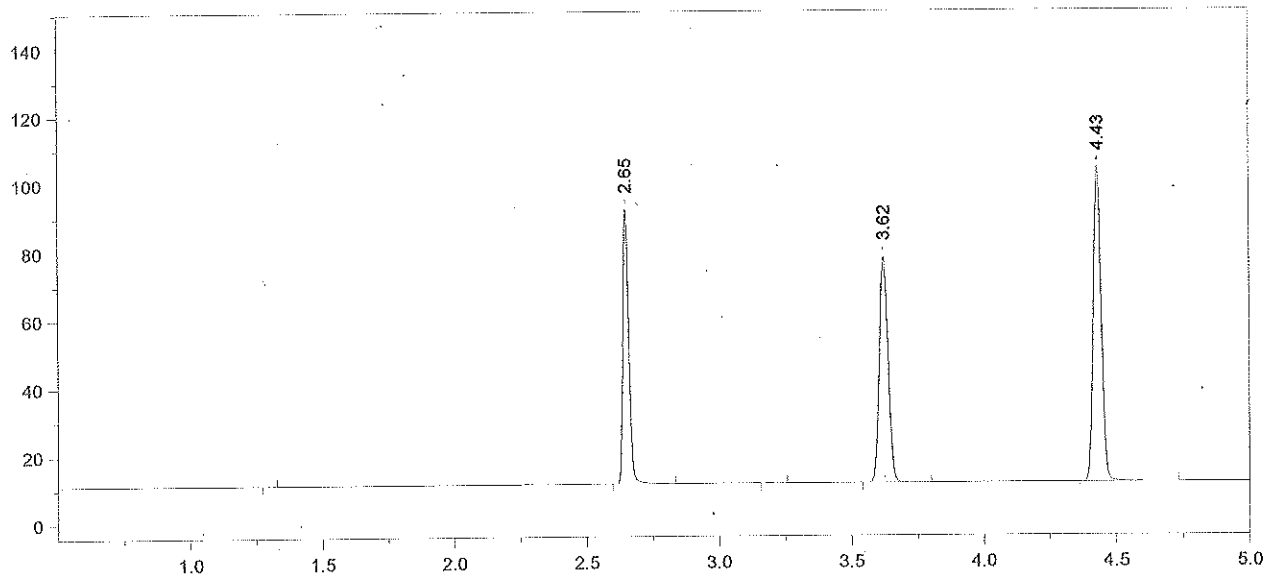


Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/31/2013
Today's Time = 10:31:11 PM
Bound File Name = VFL10312013.0033.RAW
Sample Name = 0.10 ALB
Date Taken = 10/31/2013 10:31:05 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	128933	0.1245	0.1016
4	3.62	t-Butanol	146389	0.9860	0.8047
5	4.43	n-Propanol	198176	1.0000	0.8162

13-19-100 65 [illegible]

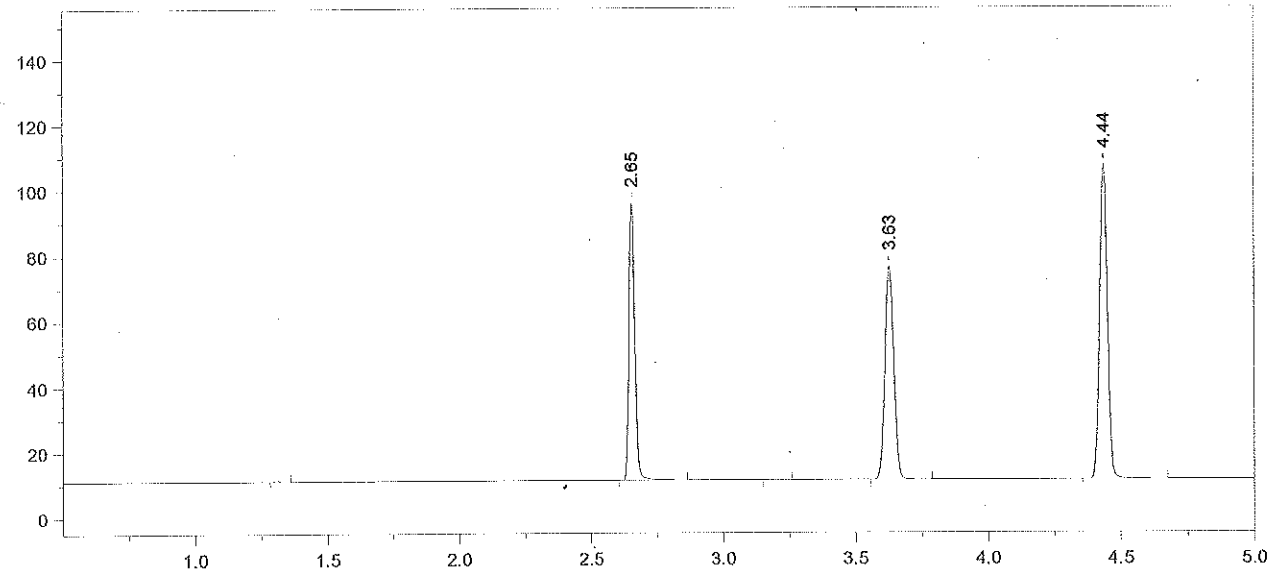


Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/31/2013 Today's Time = 10:48:46 PM
Bound File Name = VFL10312013.0034.RAW
Sample Name = 0.10 ALB
Date Taken = 10/31/2013 10:48:39 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10312013.CAL Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	124650	0.1204	0.0983
4	3.62	t-Butanol	153980	1.0372	0.8466
5	4.43	n-Propanol	198149	1.0000	0.8162

Chrom Perfect Chromatogram Report

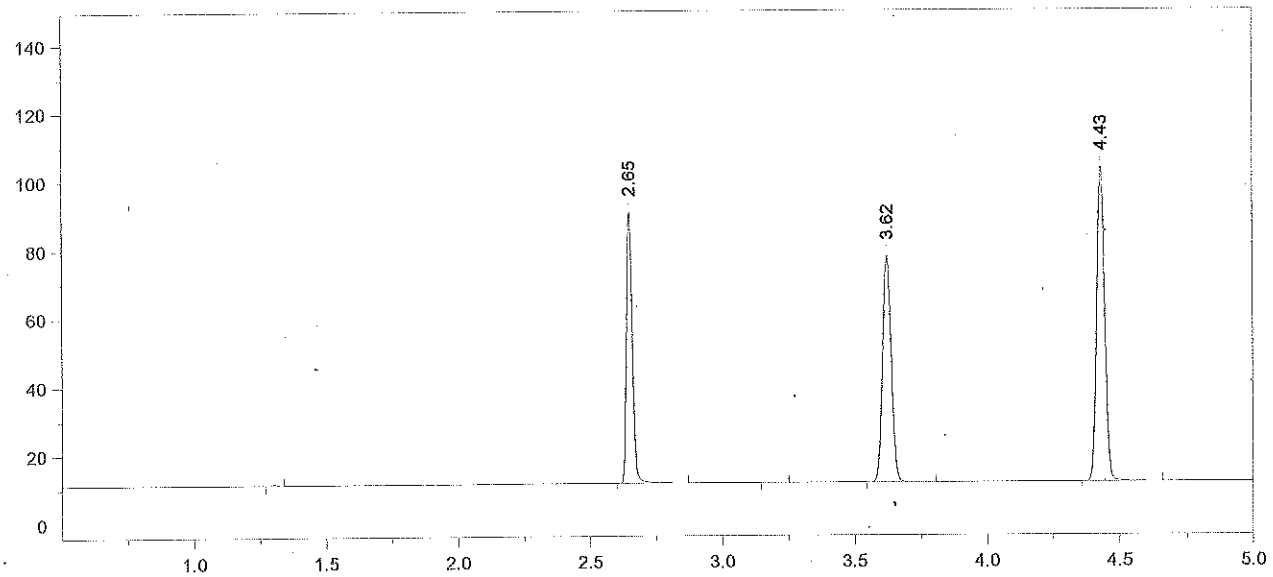


Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/31/2013 Today's Time = 11:02:44 PM
Bound File Name = VFL10312013.0035.RAW
Sample Name = 0.10 ALB
Date Taken = 10/31/2013 11:02:35 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10312013.CAL Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	130935	0.1230	0.1004
4	3.63	t-Butanol	150692	0.9872	0.8058
5	4.44	n-Propanol	203738	1.0000	0.8162

13-19 (VD [illegible]

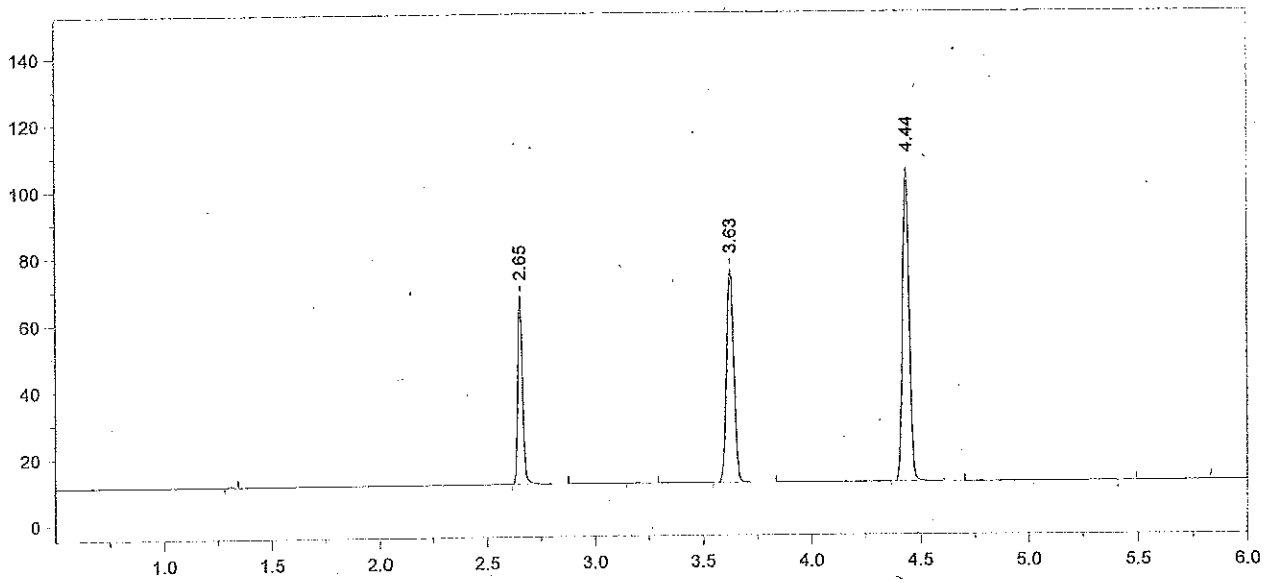


Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/31/2013 Today's Time = 11:20:13 PM
Bound File Name = VFL10312013.0036.RAW
Sample Name = 0.10 ALB
Date Taken = 10/31/2013 11:20:06 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10312013.CAL Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	122419	0.1195	0.0975
4	3.62	t-Butanol	153049	1.0417	0.8502
5	4.43	n-Propanol	196107	1.0000	0.8162

13-19-100 L8

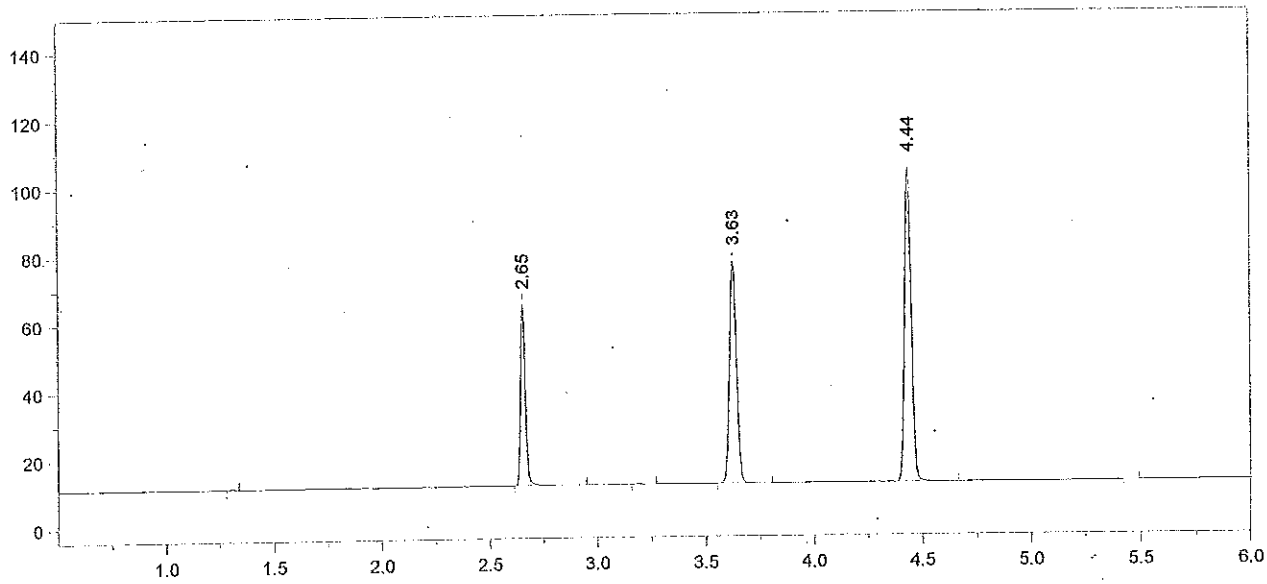


Format File Name = AlcoholVFL.FMT

Today's Date = 10/31/2013
Today's Time = 11:34:05 PM
Bound File Name = VFL10312013.0037.RAW
Sample Name = CCS
Date Taken = 10/31/2013 11:33:57 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	87568	0.0838
4	3.63	t-Butanol	147715	0.9857
5	4.44	n-Propanol	200020	1.0000

Chrom Perfect Chromatogram Report

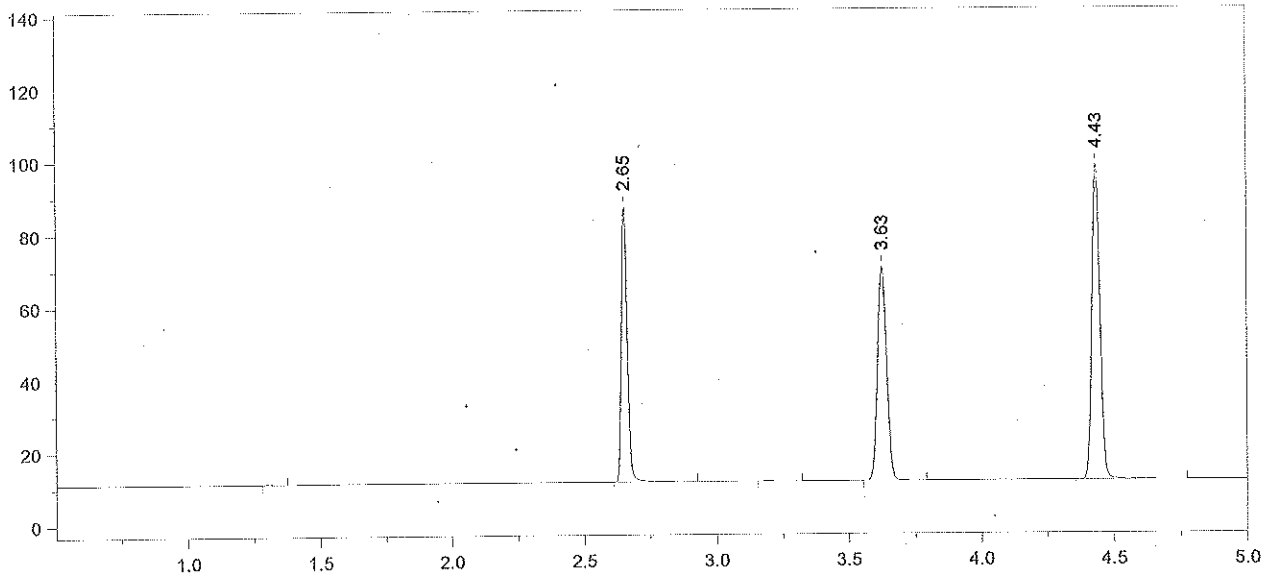


Format File Name = AlcoholVFL.FMT

Today's Date = 10/31/2013
Today's Time = 11:51:40 PM
Bound File Name = VFL10312013.0038.RAW
Sample Name = CCS
Date Taken = 10/31/2013 11:51:35 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	83987	0.0821
4	3.63	t-Butanol	151633	1.0343
5	4.44	n-Propanol	195680	1.0000

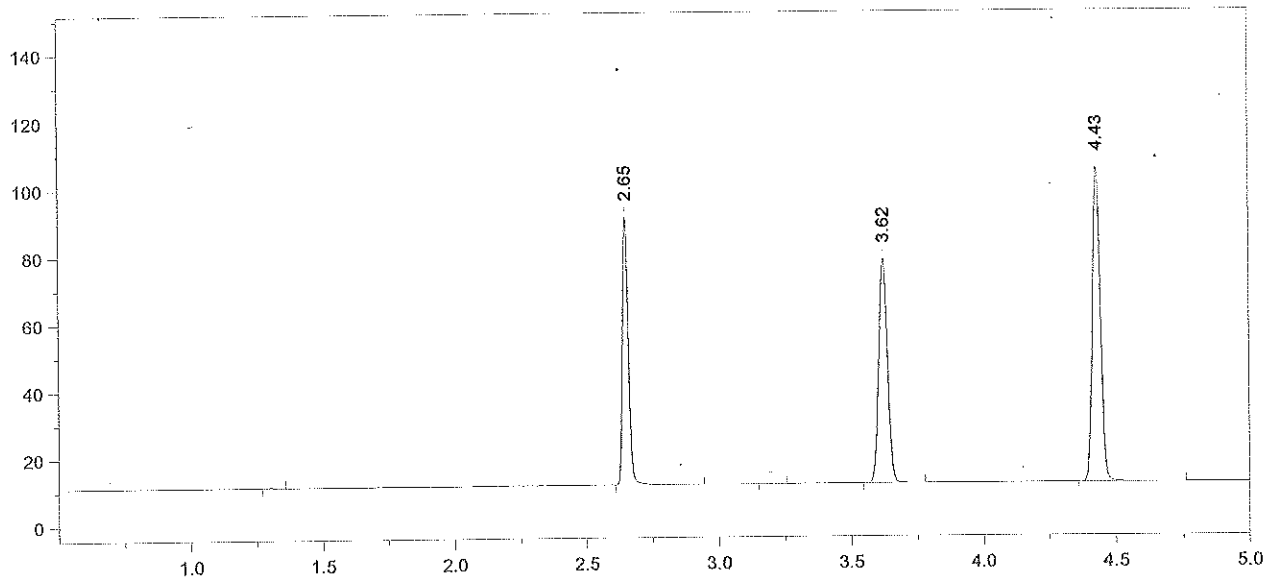
Avg vials 37 · 38 - 0.083
11/1/13



Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/1/2013
Today's Time = 12:05:44 AM
Bound File Name = VFL10312013.0039.RAW
Sample Name = 0.10 RLM
Date Taken = 11/1/2013 12:05:36 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10312013.CAL
Calibration Version = 7

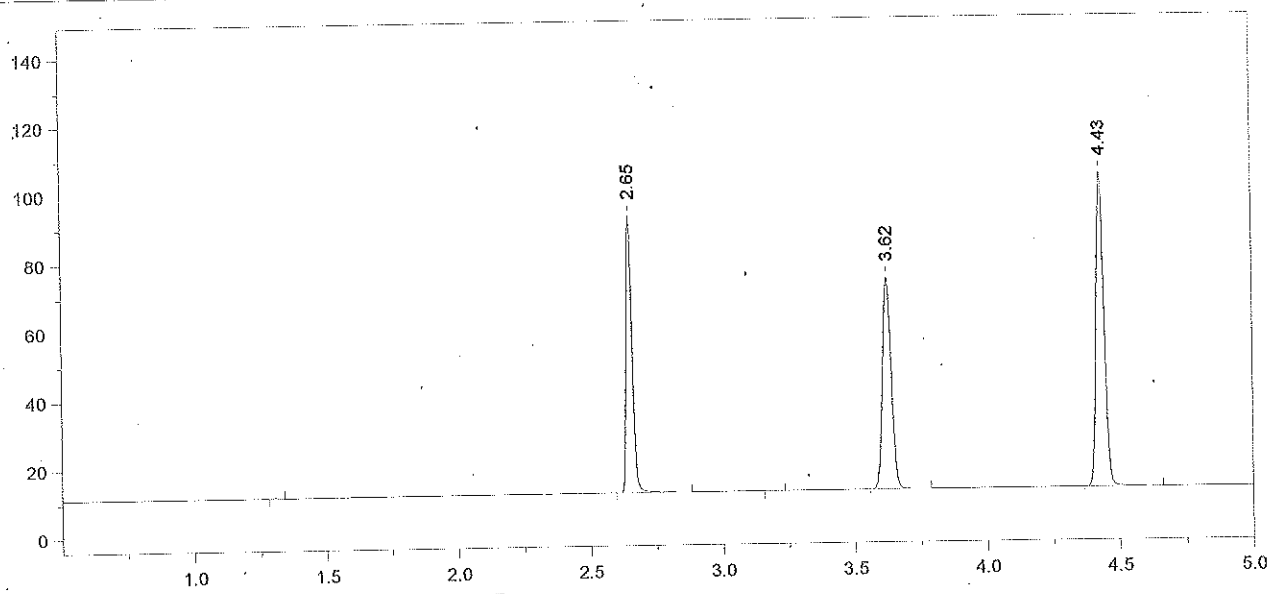
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	117691	0.1220	0.0995
4	3.63	t-Butanol	136013	0.9830	0.8023
5	4.43	n-Propanol	184694	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/1/2013
Today's Time = 12:23:13 AM
Bound File Name = VFL10312013.0040.RAW
Sample Name = 0.10 RLM
Date Taken = 11/1/2013 12:23:05 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	123779	0.1188	0.0970
4	3.62	t-Butanol	154571	1.0345	0.8443
5	4.43	n-Propanol	199440	1.0000	0.8162

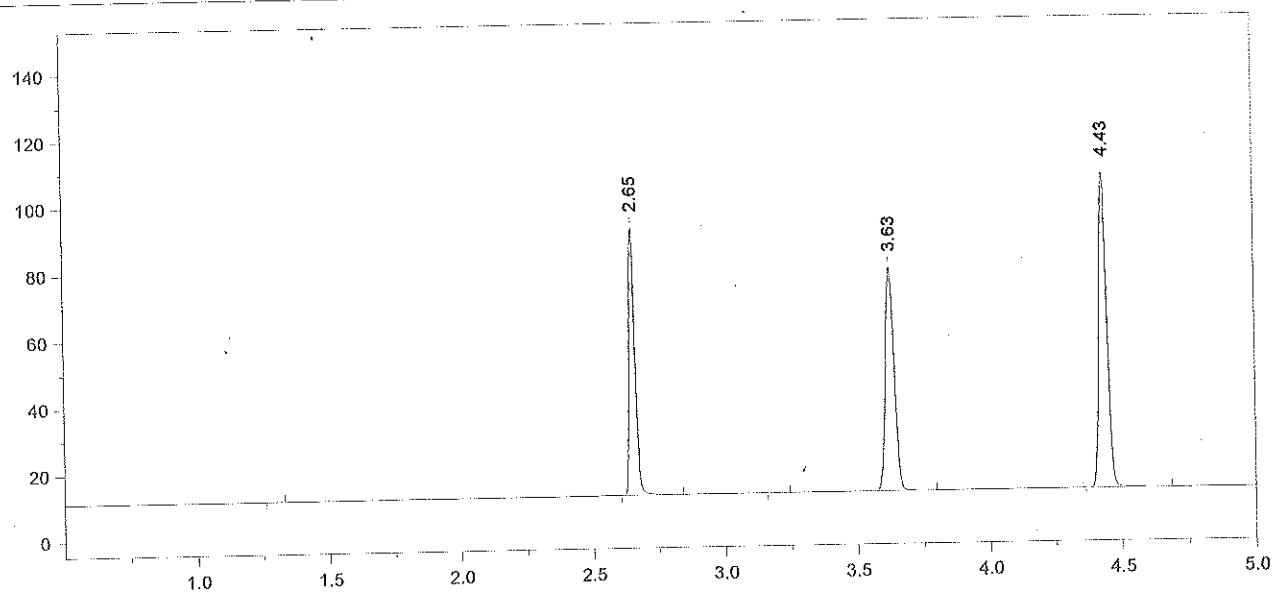


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/1/2013
Today's Time = 12:36:35 AM
Bound File Name = VFL10312013.0041.RAW
Sample Name = 0.10 RLM
Date Taken = 11/1/2013 12:36:28 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	125138	0.1226	0.1001
4	3.62	t-Butanol	142863	0.9764	0.7969
5	4.43	n-Propanol	195299	1.0000	0.8162

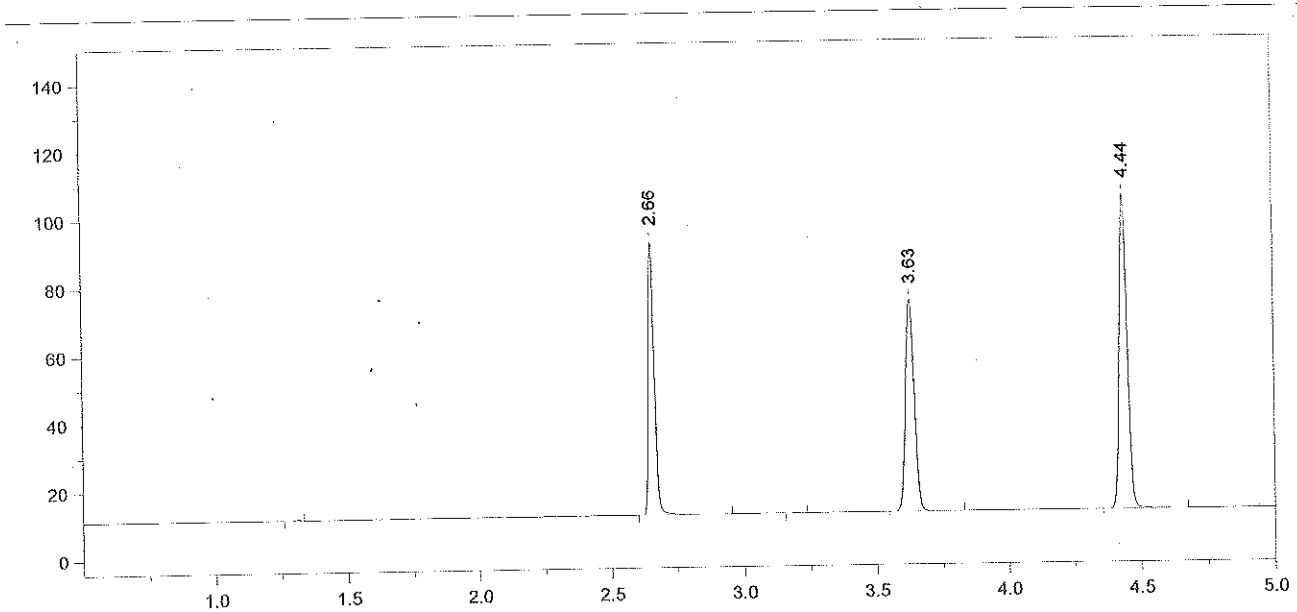
13-19-100 73



Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/1/2013
Today's Time = 12:54:38 AM
Bound File Name = VFL10312013.0042.RAW
Sample Name = 0.10 RLM
Date Taken = 11/1/2013 12:54:32 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	123889	0.1185	0.0967
4	3.63	t-Butanol	155075	1.0347	0.8446
5	4.43	n-Propanol	200039	1.0000	0.8162

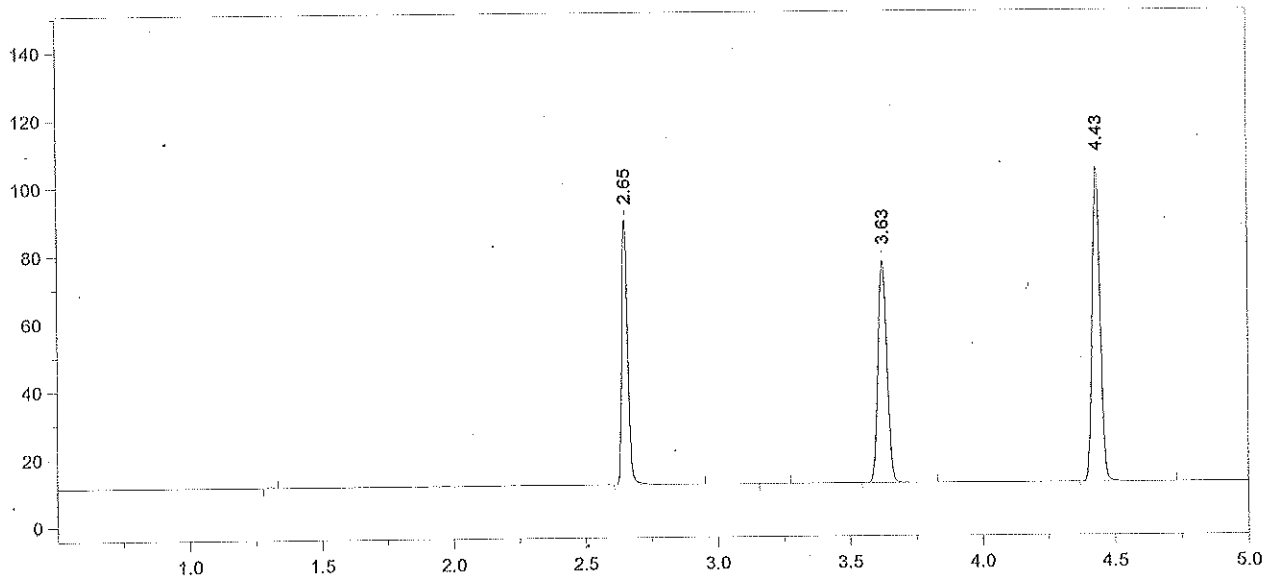


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/1/2013
Today's Time = 1:08:20 AM
Bound File Name = VFL10312013.0043.RAW
Sample Name = 0.10 RLM
Date Taken = 11/1/2013 1:08:09 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	124773	0.1214	0.0991
4	3.63	t-Butanol	144722	0.9819	0.8014
5	4.44	n-Propanol	196733	1.0000	0.8162

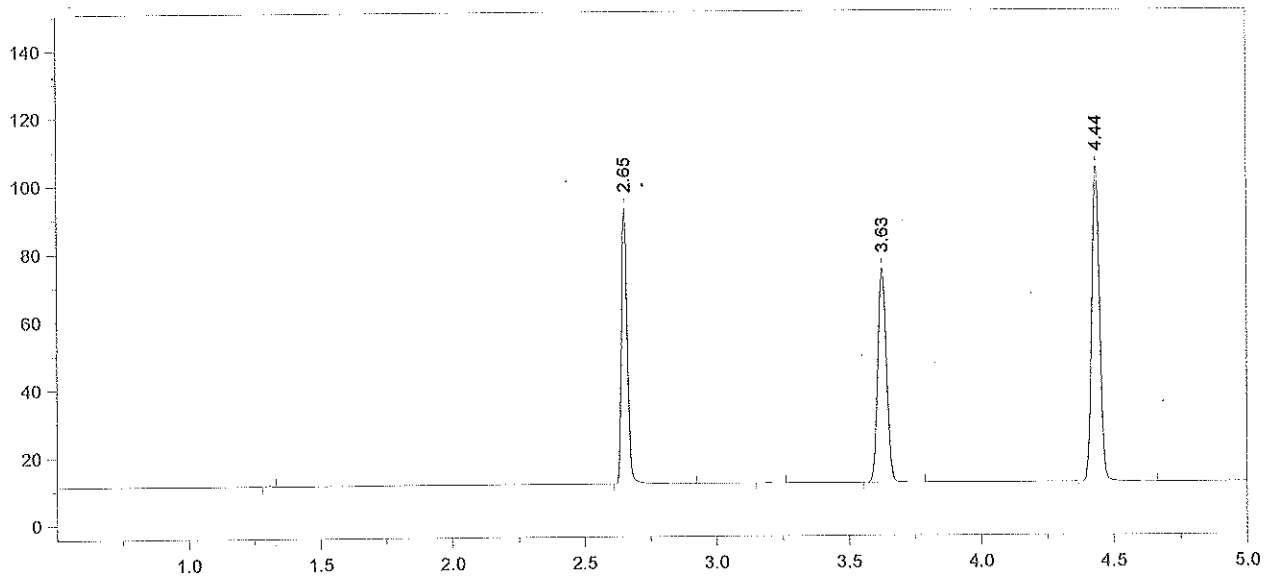
13-19-100 75 AES



Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/1/2013
Today's Time = 1:26:07 AM
Bound File Name = VFL10312013.0044.RAW
Sample Name = 0.10 RLM
Date Taken = 11/1/2013 1:25:59 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10312013.CAL
Calibration Version = 7

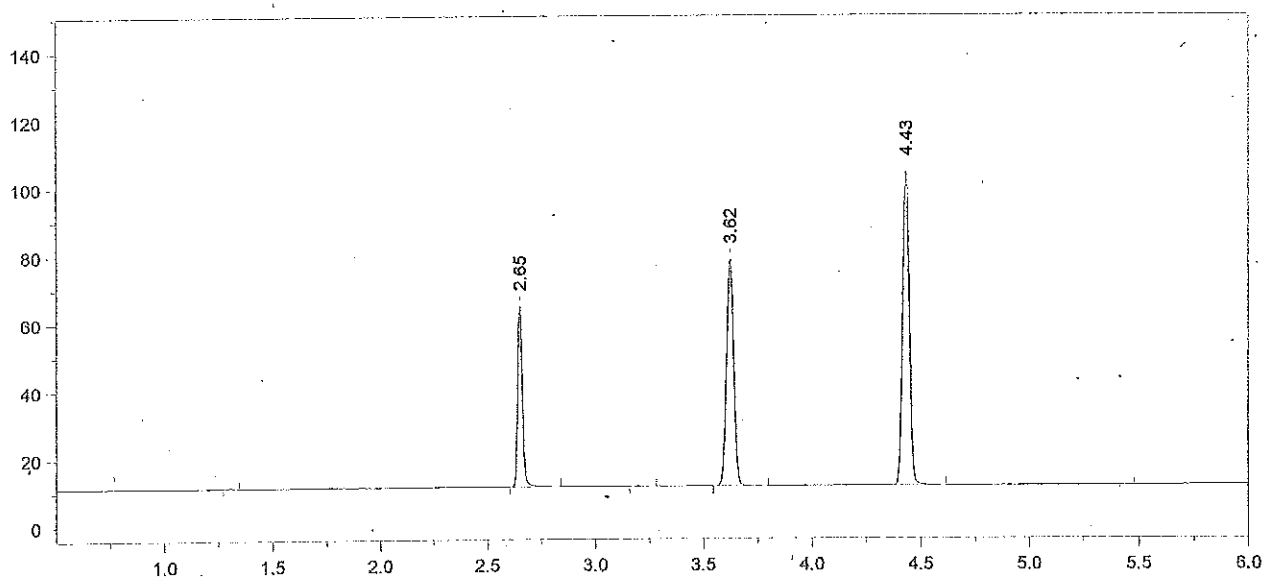
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	122660	0.1192	0.0973
4	3.63	t-Butanol	152769	1.0354	0.8451
5	4.43	n-Propanol	196935	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/1/2013
Today's Time = 1:39:53 AM
Bound File Name = VFL10312013.0045.RAW
Sample Name = 0.10 RLM
Date Taken = 11/1/2013 1:39:47 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL10312013.CAL
Calibration Version = 7

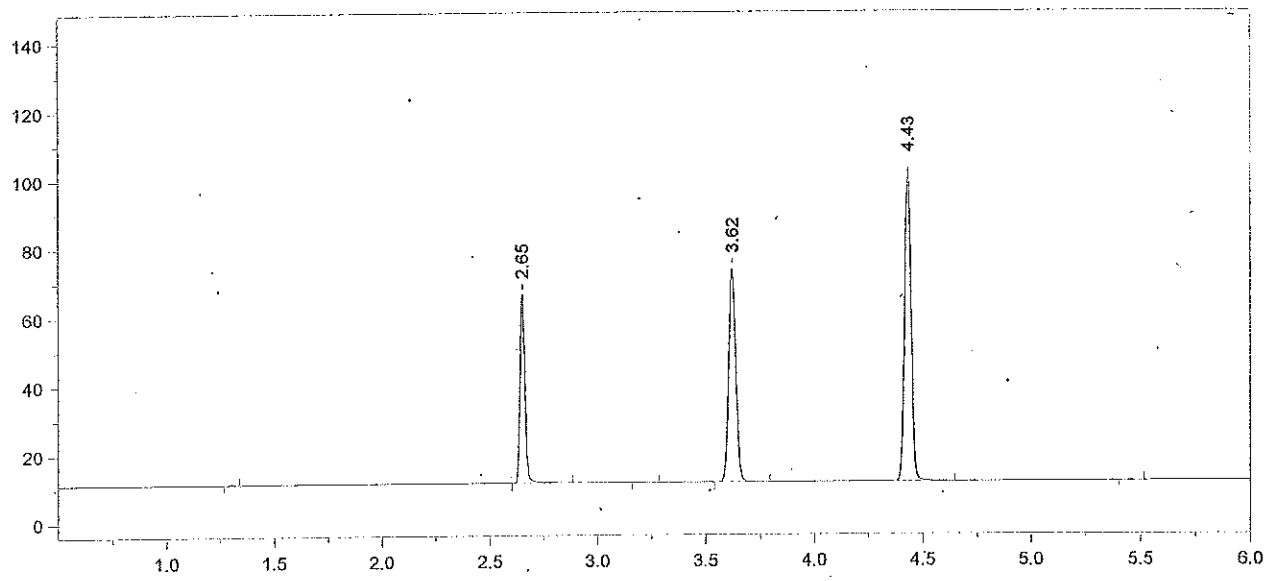
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	125987	0.1216	0.0993
4	3.63	t-Butanol	145855	0.9819	0.8014
5	4.44	n-Propanol	198268	1.0000	0.8162



Format File Name = AlcoholVFL.FMT

Today's Date = 11/1/2013
Today's Time = 1:57:30 AM
Bound File Name = VFL10312013.0046.RAW
Sample Name = CCS
Date Taken = 11/1/2013 1:57:25 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	82851	0.0801
4	3.62	t-Butanol	154721	1.0433
5	4.43	n-Propanol	197952	1.0000

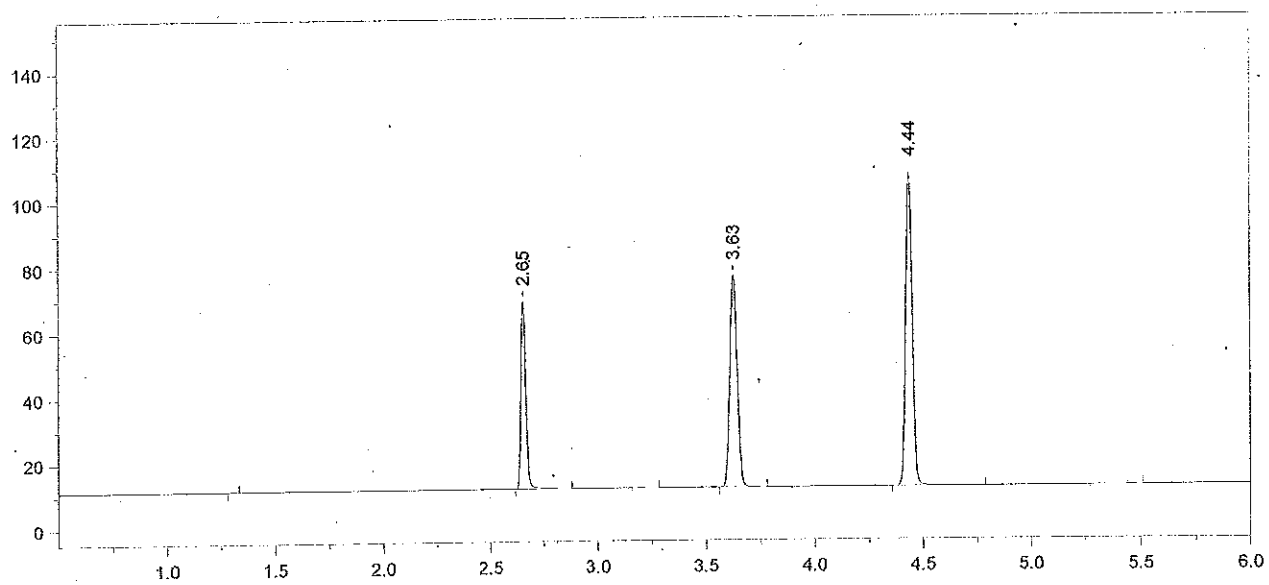


Format File Name = AlcoholVFL.FMT

Today's Date = 11/1/2013
Today's Time = 2:11:24 AM
Bound File Name = VFL10312013.0047.RAW
Sample Name = CCS
Date Taken = 11/1/2013 2:11:16 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	85597	0.0841
4	3.62	t-Butanol	144045	0.9876
5	4.43	n-Propanol	194688	1.0000

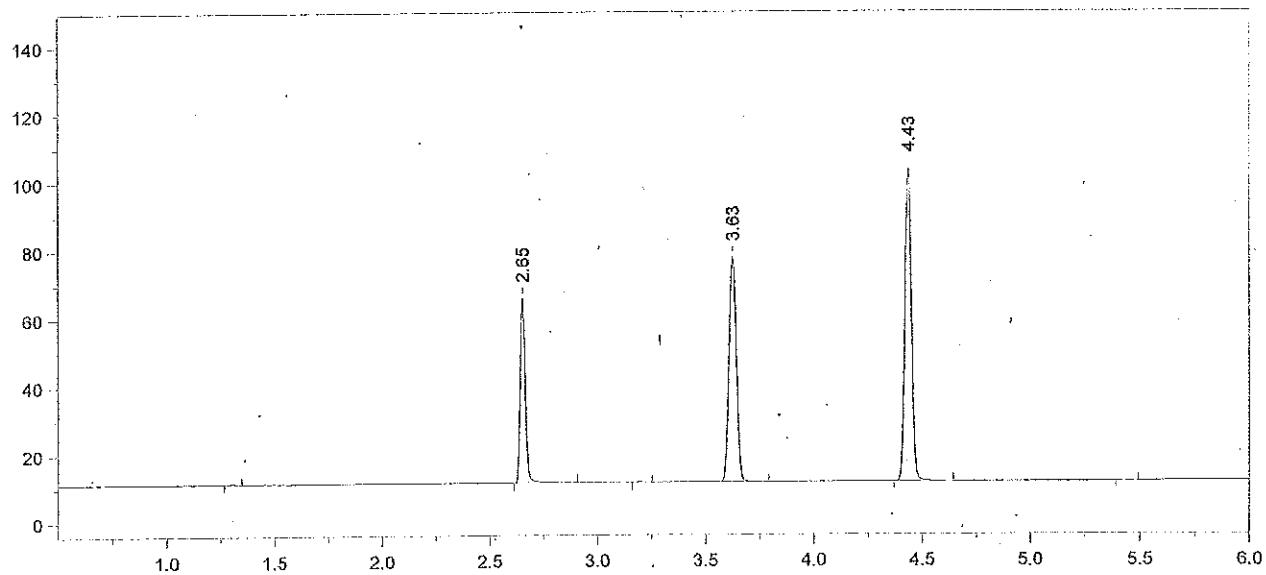
Avg vials 46 + 47 = 0.082
11/1/13



Format File Name = AlcoholVFL.FMT

Today's Date = 11/1/2013
Today's Time = 4:17:15 AM
Bound File Name = VFL10312013.0055.RAW
Sample Name = CCS
Date Taken = 11/1/2013 4:17:05 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	90528	0.0849
4	3.63	t-Butanol	150623	0.9850
5	4.44	n-Propanol	204098	1.0000

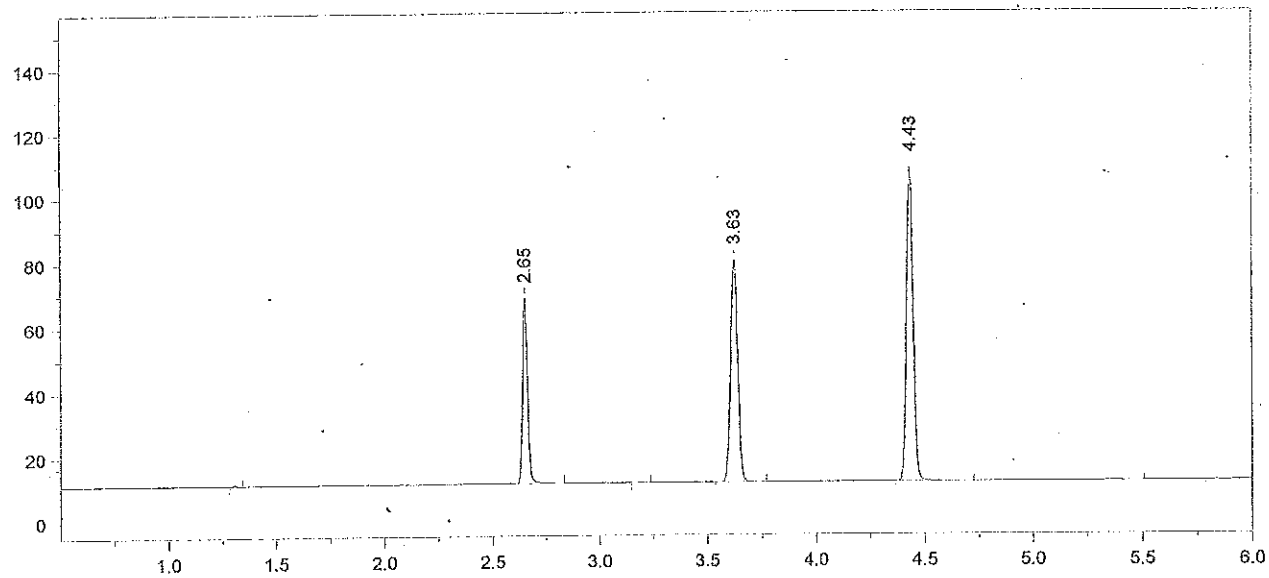


Format File Name = AlcoholVFL.FMT

Today's Date = 11/1/2013
Today's Time = 4:34:41 AM
Bound File Name = VFL10312013.0056.RAW
Sample Name = CCS
Date Taken = 11/1/2013 4:34:37 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	84914	0.0828
4	3.63	t-Butanol	153341	1.0427
5	4.43	n-Propanol	196287	1.0000

Avg vials 55 + 56 = 0.084
4/1/13 [illegible]

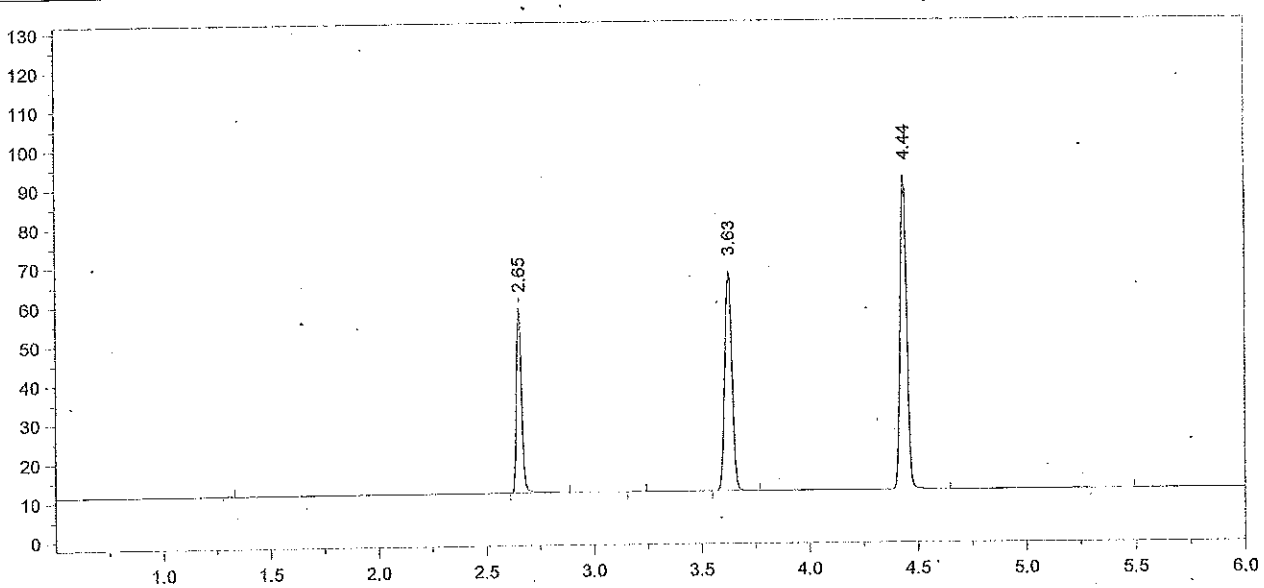


Format File Name = AlcoholVFL.FMT

Today's Date = 11/1/2013
Today's Time = 6:40:32 AM
Bound File Name = VFL10312013.0064.RAW
Sample Name = CCS
Date Taken = 11/1/2013 6:40:22 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10312013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	89329	0.0832
4	3.63	t-Butanol	158549	1.0296
5	4.43	n-Propanol	205532	1.0000

Chrom Perfect Chromatogram Report



Format File Name = AlcoholVFL.FMT

Today's Date = 11/1/2013
Today's Time = 6:54:25 AM

Bound File Name = VFL10312013.0065.RAW
Sample Name = CCS
Date Taken = 11/1/2013 6:54:15 AM
Method file = Blood Alc temp VFL.MET
Calibration file = VFL10312013.CAL

VFL Headspace Alcohol

Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	74038	0.0831
4	3.63	t-Butanol	130002	1.0176
5	4.44	n-Propanol	170516	1.0000

Avg vials 64 + 65 = 0.083
11/1/13 [illegible]