VERMONT FORENSIC LABORATORY

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

Certificate of Analysis of DataMaster Certification Solution

On 6/24/2015, an ethanol solution was prepared by Amanda Bolduc for use as a DataMaster Certification solution. The solution was prepared per standard laboratory practice and assigned the lot number 15-11-020 and an expiration date of 6/24/2016.

On 6/25/2015 and 7/8/2015, the solution was analyzed against calibration Cal Version VFL06252015.CAL and Cal Version VFL07082015.CAL. 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 0.020 g/210L simulated breath ethanol concentration and approved for use as a DataMaster Certification solution.

Dated at Waterbury, Vermont this 15th day of July, 2015

Amanda Bolduc

VERMONT FORENSIC LABORATORY

SIMULATOR SOLUTION REVIEW CHECKLIST

SOLUTION TYPE AND VOLUME: 0.02 Certification Solution 2L

LOT NUMBER#: 15-11-020 **ANALYST:** AB / DP

TECHNICAL REVIEWER: [illegible] **DATE:** 7/14/2015

- [X] X QC done and complete?
- [X] X Pertinent standard lot numbers listed?
- [X] X Data package complete?
- [X] X Transcribed data and calculations verified?
- [X] X Calibration and control results all within ± 10% (± 20% for Std A) of the known values?
- [X] X Calibration line correlation factor at least 0.99xx?
- [X] X Average error for components of the calibration line less than 10%?
- [X] X Timing mix chromatogram demonstrates appropriate identification of components and separation from ethanol?
- [X] X Surrogate compound concentrations all within 0.900 to 1.100 range, inclusive?
- [X] X Statistical means of the continuing calibration check sample duplicate analysis all within +/- 10% of the known value?
- [X] X Calculated average within acceptable range of the target concentration for specific solution type?
- [X] X All individual readings within 3 standard deviations of the average for each run and for the total average?
- [X] RPD <10%?

Comments:

ADMINISTRATIVE REVIEWER: [illegible] **DATE:** 7/15/2015

- [X] Are all pages numbered and initialed on the Examination Documents?
- [X] Solution lot number written on all pages?
- [X] Is the Reagent Preparation Log filled out properly?
- [X] Is the Certificate of Analysis filled out properly?
- [X] Has a label sheet been created, and is it correct?

Comments:

Check Mark or X = pass, NA= Not Applicable

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

DataMaster Certification Solution
Lot # 15-11-020 EtOHaq Conc: 0.020 g/210 L
Range: 0.018 – 0.022
Preparation Date: 06/24/2015 Expires: 06/24/2016

OPENED:

VERMONT FORENSIC LABORATORY
Simulator Solution Worksheet

0.02 Certification Solution 2L
Lot # 15-11-020
Prepared 06/24/2015 by ALB
Exp 06/24/2016

ALB CAL VFL06252015.CAL
ALB/DJP Vials
Analyzed on 06/25/2015

0.0200	DJP
0.0202	
0.0198	
0.0201	
0.0199	
0.0202	
0.0198	
0.0206	ALB
0.0202	
0.0205	
0.0206	
0.0203	
0.0199	
0.0205	

Ave. =	0.0202
Std Dev. =	0.0003
Min. =	0.0198
Max. =	0.0206

AQ QC Manf.	Cerilliant
AQ QC Lot #	FN021111-03
Cal Std A Lot #	FN01131401
Cal Std B Lot #	FN08101401
Cal Std C Lot #	FN05211402
Cal Std D Lot #	FN032712-01
Cal Std E Lot #	FN012712-01
Int Std Lot #	IS-06022015A
TMX Lot #	TMX-08112014
Blank Lot #	BL-01162015

DJP CAL VFL07082015.CAL
ALB/DJP Vials
Analyzed on 07/08/2015

0.0200	ALB
0.0202	
0.0197	
0.0201	
0.0195	
0.0199	
0.0195	
0.0197	DJP
0.0194	
0.0197	
0.0194	
0.0197	
0.0197	
0.0197	

Ave. =	0.0197
Std Dev. =	0.0002
Min. =	0.0194
Max. =	0.0202

AQ QC Manf.	Cerilliant
AQ QC Lot #	FN021111-03
Cal Std A Lot #	FN01131401
Cal Std B Lot #	FN08101401
Cal Std C Lot #	FN05211402
Cal Std D Lot #	FN032712-01
Cal Std E Lot #	FN012712-01
Int Std Lot #	IS-06022015A
TMX Lot #	TMX-08112014
Blank Lot #	BL-01162015

Total Values from Both Runs

Average	Mean
0.0200	0.0194
0.0202	
0.0198	0.0195
0.0201	
0.0199	0.0197
0.0202	
0.0198	
0.0206	
0.0202	
0.0205	
0.0206	0.0198
0.0203	
0.0199	0.0199
0.0205	
0.0200	
0.0202	0.0200
0.0197	
0.0201	0.0201
0.0195	
0.0199	0.0202
0.0195	
0.0197	
0.0194	
0.0197	0.0203
0.0194	0.0205
0.0197	
0.0197	0.0206
0.0197	

Ave. =	0.0200
Avg Std Dev. =	0.0004
Mean =	0.0200
Mean Std Dev. =	0.0004
Min. =	0.0194
Max =	0.0206
RPD =	6.01%

7/10/15

15-11-020 page 1 of 123

File Name = C:\Alcohol Data\VFL06252015\VFL06252015.SEQ
Version = 3
File Date = 6/26/2015 8:30:25 AM

Entry #	Raw File Name	Method File Name	Sample Name	Sample Wt.	Int. Std. Amount
1	VFL06252015.0001.raw	Blood Alc temp VFL.MET	BLANK	1.00	1.00
2	VFL06252015.0002.raw	Blood Alc temp VFL.MET	TMX	1.00	1.00
3	VFL06252015.0003.raw	Blood Alc temp VFL.MET	STD A	1.00	1.00
4	VFL06252015.0004.raw	Blood Alc temp VFL.MET	STD B	1.00	1.00
5	VFL06252015.0005.raw	Blood Alc temp VFL.MET	STD C	1.00	1.00
6	VFL06252015.0006.raw	Blood Alc temp VFL.MET	STD D	1.00	1.00
7	VFL06252015.0007.raw	Blood Alc temp VFL.MET	STD E	1.00	1.00
8	VFL06252015.0008.raw	Blood Alc temp VFL.MET	WB	1.00	1.00
9	VFL06252015.0009.raw	Blood Alc temp VFL.MET	WB	1.00	1.00
10	VFL06252015.0010.raw	Blood Alc temp VFL.MET	AQ	1.00	1.00
11	VFL06252015.0011.raw	Blood Alc temp VFL.MET	AQ	1.00	1.00
12	VFL06252015.0012.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
13	VFL06252015.0013.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
14	VFL06252015.0014.raw	Blood Alc temp VFL.MET	V15-1027 A1-1	1.00	1.00
15	VFL06252015.0015.raw	Blood Alc temp VFL.MET	V15-1027 A1-1	1.00	1.00
16	VFL06252015.0016.raw	simsoln.met	.02 DP	1.00	1.00
17	VFL06252015.0017.raw	simsoln.met	.02 DP	1.00	1.00
18	VFL06252015.0018.raw	simsoln.met	.02 DP	1.00	1.00
19	VFL06252015.0019.raw	simsoln.met	.02 DP	1.00	1.00
20	VFL06252015.0020.raw	simsoln.met	.02 DP	1.00	1.00
21	VFL06252015.0021.raw	simsoln.met	.02 DP	1.00	1.00
22	VFL06252015.0022.raw	simsoln.met	.02 DP	1.00	1.00
23	VFL06252015.0023.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
24	VFL06252015.0024.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
25	VFL06252015.0025.raw	simsoln.met	.02 ALB	1.00	1.00
26	VFL06252015.0026.raw	simsoln.met	.02 ALB	1.00	1.00
27	VFL06252015.0027.raw	simsoln.met	.02 ALB	1.00	1.00
28	VFL06252015.0028.raw	simsoln.met	.02 ALB	1.00	1.00
29	VFL06252015.0029.raw	simsoln.met	.02 ALB	1.00	1.00
30	VFL06252015.0030.raw	simsoln.met	.02 ALB	1.00	1.00
31	VFL06252015.0031.raw	simsoln.met	.02 ALB	1.00	1.00
32	VFL06252015.0032.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
33	VFL06252015.0033.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
34	VFL06252015.0034.raw	simsoln.met	.10 DP	1.00	1.00
35	VFL06252015.0035.raw	simsoln.met	.10 DP	1.00	1.00
36	VFL06252015.0036.raw	simsoln.met	.10 DP	1.00	1.00
37	VFL06252015.0037.raw	simsoln.met	.10 DP	1.00	1.00
38	VFL06252015.0038.raw	simsoln.met	.10 DP	1.00	1.00
39	VFL06252015.0039.raw	simsoln.met	.10 DP	1.00	1.00
40	VFL06252015.0040.raw	simsoln.met	.10 DP	1.00	1.00
41	VFL06252015.0041.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
42	VFL06252015.0042.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
43	VFL06252015.0043.raw	simsoln.met	.10 ALB	1.00	1.00
44	VFL06252015.0044.raw	simsoln.met	.10 ALB	1.00	1.00
45	VFL06252015.0045.raw	simsoln.met	.10 ALB	1.00	1.00
46	VFL06252015.0046.raw	simsoln.met	.10 ALB	1.00	1.00
47	VFL06252015.0047.raw	simsoln.met	.10 ALB	1.00	1.00
48	VFL06252015.0048.raw	simsoln.met	.10 ALB	1.00	1.00
49	VFL06252015.0049.raw	simsoln.met	.10 ALB	1.00	1.00
50	VFL06252015.0050.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
51	VFL06252015.0051.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
52	VFL06252015.0052.raw	Blood Alc temp VFL.MET	CCS 06262015	1.00	1.00
53	VFL06252015.0053.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
54	VFL06252015.0054.raw	simsoln.met	.04 DP	1.00	1.00
55	VFL06252015.0055.raw	simsoln.met	.04 DP	1.00	1.00
56	VFL06252015.0056.raw	simsoln.met	.04 DP	1.00	1.00
57	VFL06252015.0057.raw	simsoln.met	.04 DP	1.00	1.00
58	VFL06252015.0058.raw	simsoln.met	.04 DP	1.00	1.00
59	VFL06252015.0059.raw	simsoln.met	.04 DP	1.00	1.00
60	VFL06252015.0060.raw	simsoln.met	.04 DP	1.00	1.00
61	VFL06252015.0061.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
62	VFL06252015.0062.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00

Casework samples not included AB 7/8/15

other lots of Sim Soln not included AB 7/8/15

15-11-020 PAGE 2

AB 7/8/15

Chrom Perfect Sequence File

Entry #	Raw File Name	Method File Name	Sample Name	Sample Wt.	Int. Std. Amount
63	VFL06252015.0063.raw	simsoln.met	.04 AB	1.00	1.00
64	VFL06252015.0064.raw	simsoln.met	.04 AB	1.00	1.00
65	VFL06252015.0065.raw	simsoln.met	.04 AB	1.00	1.00
66	VFL06252015.0066.raw	simsoln.met	.04 AB	1.00	1.00
67	VFL06252015.0067.raw	simsoln.met	.04 AB	1.00	1.00
68	VFL06252015.0068.raw	simsoln.met	.04 AB	1.00	1.00
69	VFL06252015.0069.raw	simsoln.met	.04 AB	1.00	1.00
70	VFL06252015.0070.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
71	VFL06252015.0071.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00

other lot not included
AB 7/8/15

15-11-020 PRES

AB 7/8/15

File Name: C:\Methods\VFL06252015.CAL
Version: 7

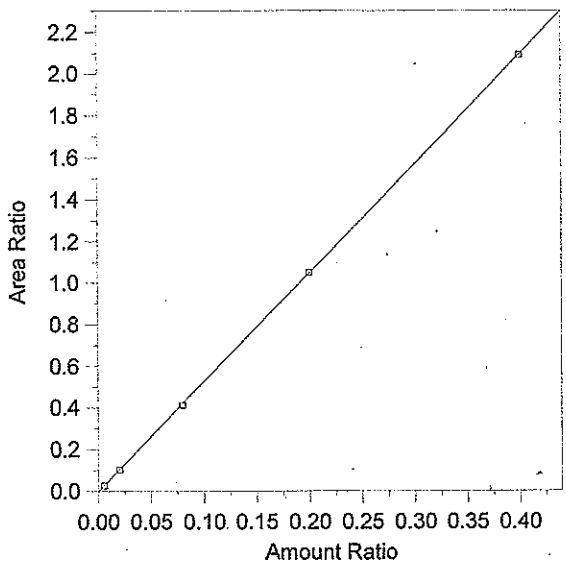
Creator:
Description:
Reason for change:

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

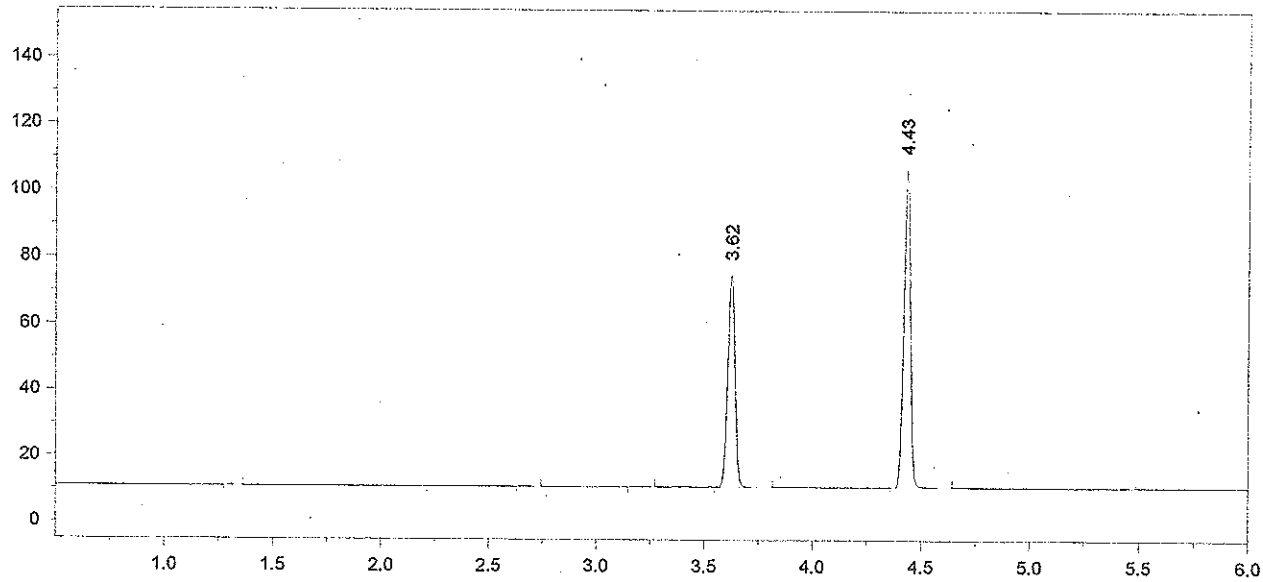
Y = 5.231585 X + 0

Linear fit with equal weighting, forced to origin
Coefficient of determination: 0.999973
Average error: 2.029%
Average CF: 5.266972
RSD: 3.298%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source	Date and time
1	(0.0836)	(85146)	--	--	0.0836	85146	Manual	8/13/2014 9:33:12 AM
2	0.005	4754.402	950880.4	6.368	0.005	2.782365E-02	C:\Alcohol Data\VFL06252015\VFL06252015.0003.BND	6/25/2015 4:15:53 PM
3	0.02	17961.82	898091.1	-1.559	0.02	0.103	C:\Alcohol Data\VFL06252015\VFL06252015.0004.BND	6/25/2015 4:32:28 PM
4	0.08	82365.38	1029567	-1.798	0.08	0.4110004	C:\Alcohol Data\VFL06252015\VFL06252015.0005.BND	6/25/2015 4:47:25 PM
5	0.2	201059.2	1005296	0.396	0.2	1.050461	C:\Alcohol Data\VFL06252015\VFL06252015.0006.BND	6/25/2015 5:03:54 PM
6	0.4	425631.5	1064079	-0.024	0.4	2.092128	C:\Alcohol Data\VFL06252015\VFL06252015.0007.BND	6/25/2015 5:17:10 PM

15-11-020 PR054

AB 7/8/15



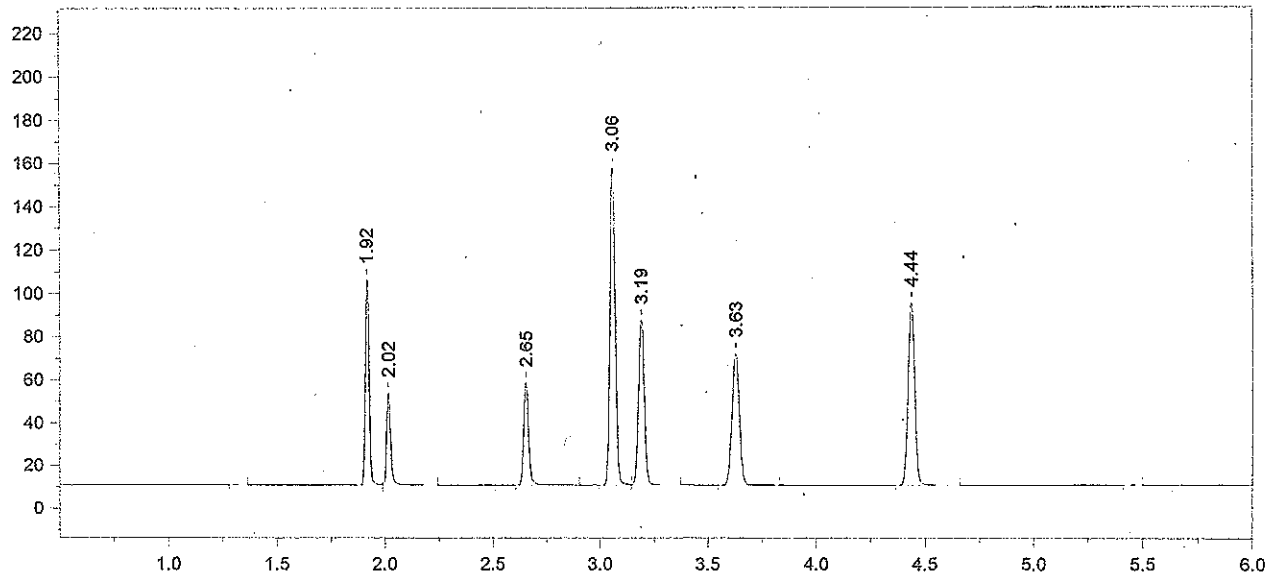
Format File Name = AlcoholVFL.FMT

Today's Date = 6/26/2015
Today's Time = 8:11:02 AM
Bound File Name = VFL06252015.0001.RAW
Sample Name = BLANK
Date Taken = 6/25/2015 3:43:44 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
4	3.62	t-Butanol	148612	0.9597
5	4.43	n-Propanol	203609	1.0000

15-11-010 Page 5

AB 7/8/15



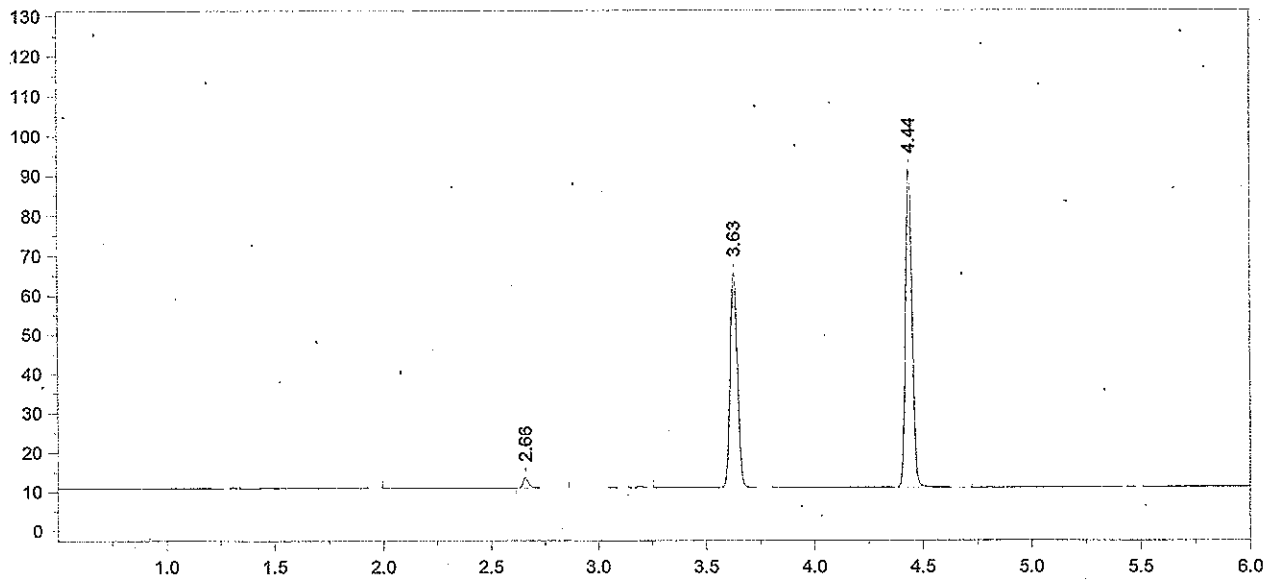
Format File Name = AlcoholVFL.FMT

Today's Date = 6/26/2015 Today's Time = 8:11:14 AM
Bound File Name = VFL06252015.0002.RAW
Sample Name = TMX
Date Taken = 6/25/2015 4:00:55 PM VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	1.92	Acetaldehyde	113494	0.0695
3	2.02	Methanol	54511	0.1232
4	2.65	Ethanol	75495	0.0799
5	3.06	Acetone	252676	0.0657
6	3.19	Isopropanol	144242	0.0848
7	3.63	t-Butanol	142037	1.0347
8	4.44	n-Propanol	180502	1.0000

AB 7/8/15

19-11020 page 6



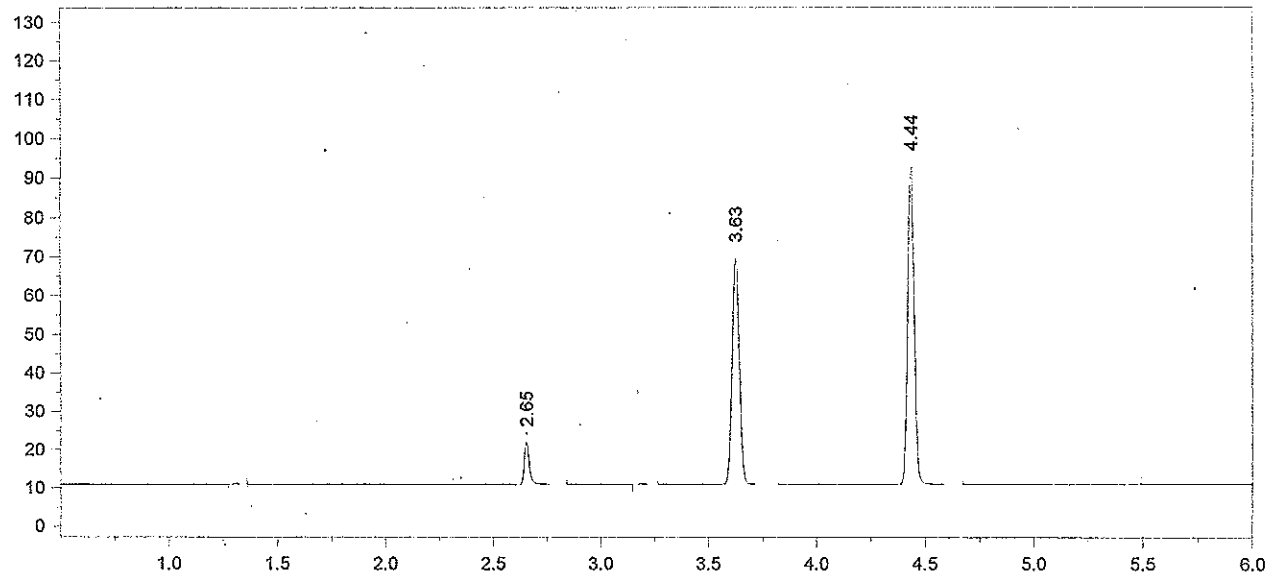
Format File Name = AlcoholVFL.FMT

Today's Date = 6/26/2015
Today's Time = 8:11:21 AM
Bound File Name = VFL06252015.0003.RAW
Sample Name = STD A
Date Taken = 6/25/2015 4:15:46 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.66	Ethanol	04754	0.0053
6	3.63	t-Butanol	126596	0.9741
7	4.44	n-Propanol	170876	1.0000

19-11-010 Ans 7

7/8/15



Format File Name = AlcoholVFL.FMT

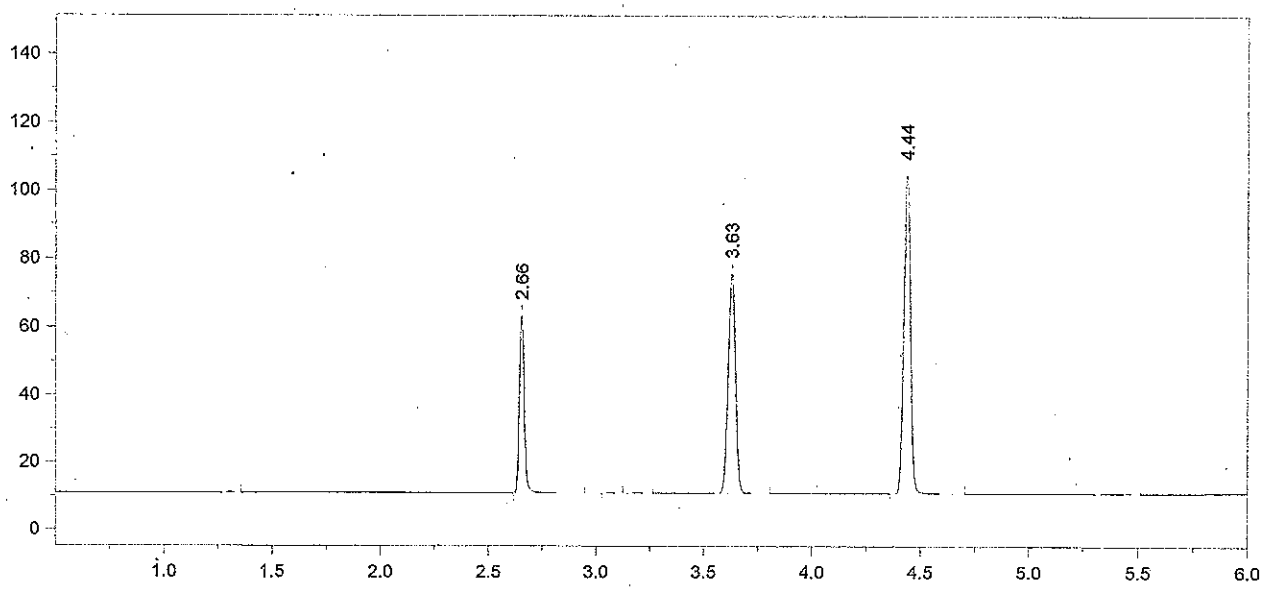
Today's Date = 6/26/2015
Today's Time = 8:11:30 AM
Bound File Name = VFL06252015.0004.RAW
Sample Name = STD B
Date Taken = 6/25/2015 4:32:19 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	17962	0.0197
4	3.63	t-Butanol	136108	1.0263
5	4.44	n-Propanol	174387	1.0000

AB 7/8/15

15-11-020 Abs8

DC



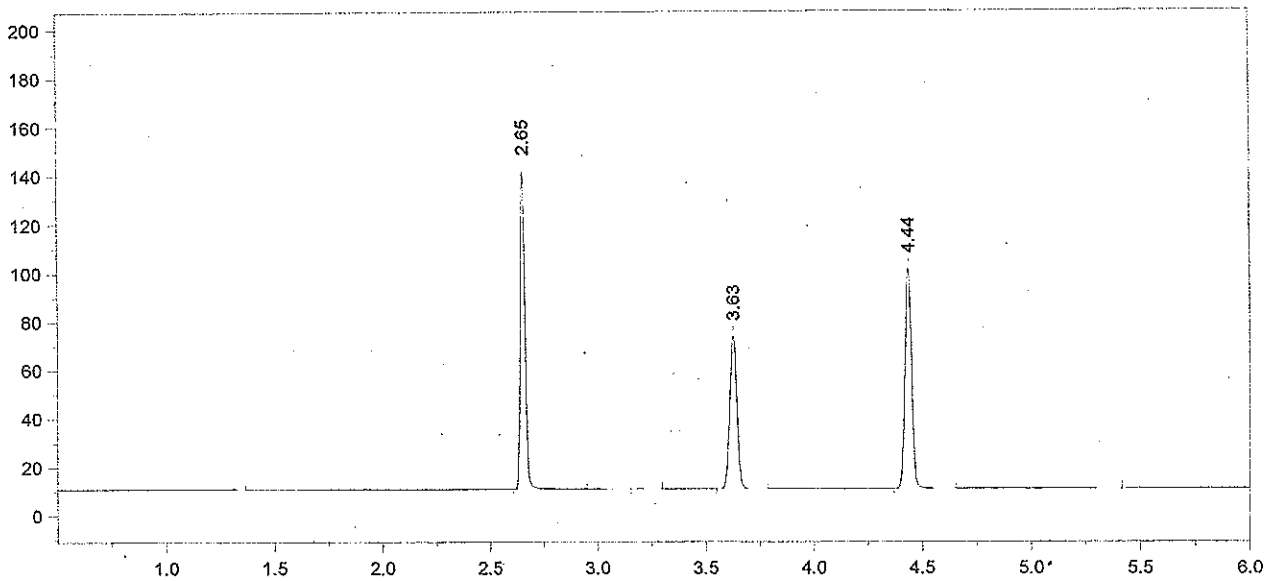
Format File Name = AlcoholVFL.FMT

Today's Date = 6/26/2015
Today's Time = 8:11:38 AM
Bound File Name = VFL06252015.0005.RAW
Sample Name = STD C
Date Taken = 6/25/2015 4:47:15 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	82365	0.0786
5	3.63	t-Butanol	149273	0.9794
6	4.44	n-Propanol	200402	1.0000

AB 7/8/15

15-11-020 Page 9



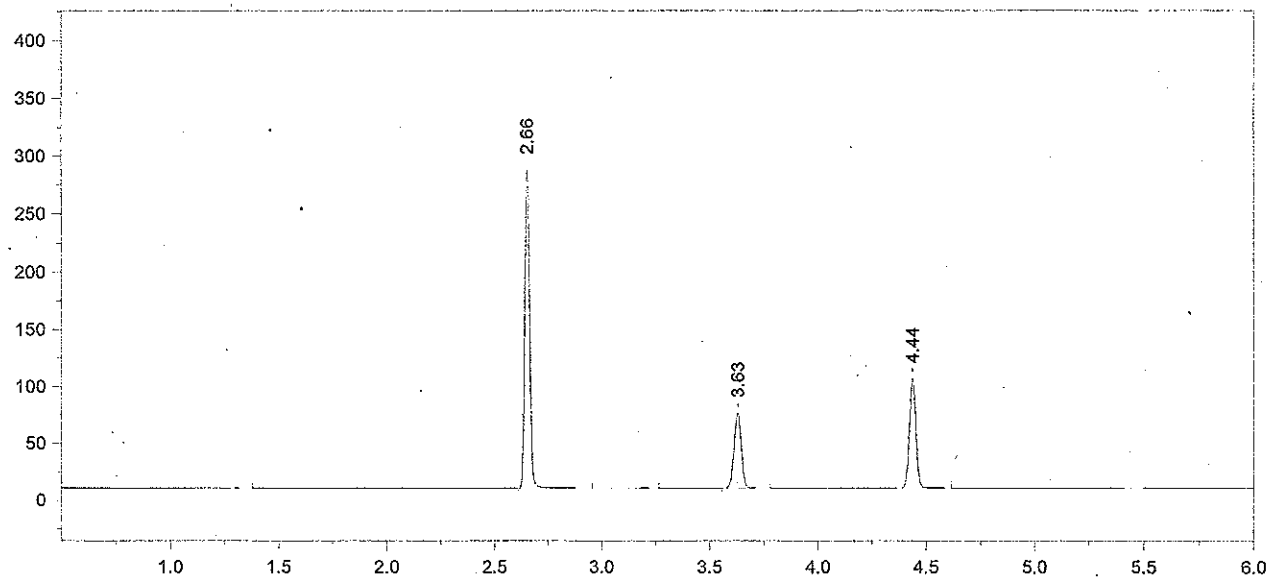
Format File Name = AlcoholVFL.FMT

Today's Date = 6/26/2015
Today's Time = 8:11:44 AM
Bound File Name = VFL06252015.0006.RAW
Sample Name = STD D
Date Taken = 6/25/2015 5:03:46 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	201059	0.2008
4	3.63	t-Butanol	146124	1.0038
5	4.44	n-Propanol	191401	1.0000

AS 7/8/15

15-11-020 Alice 10



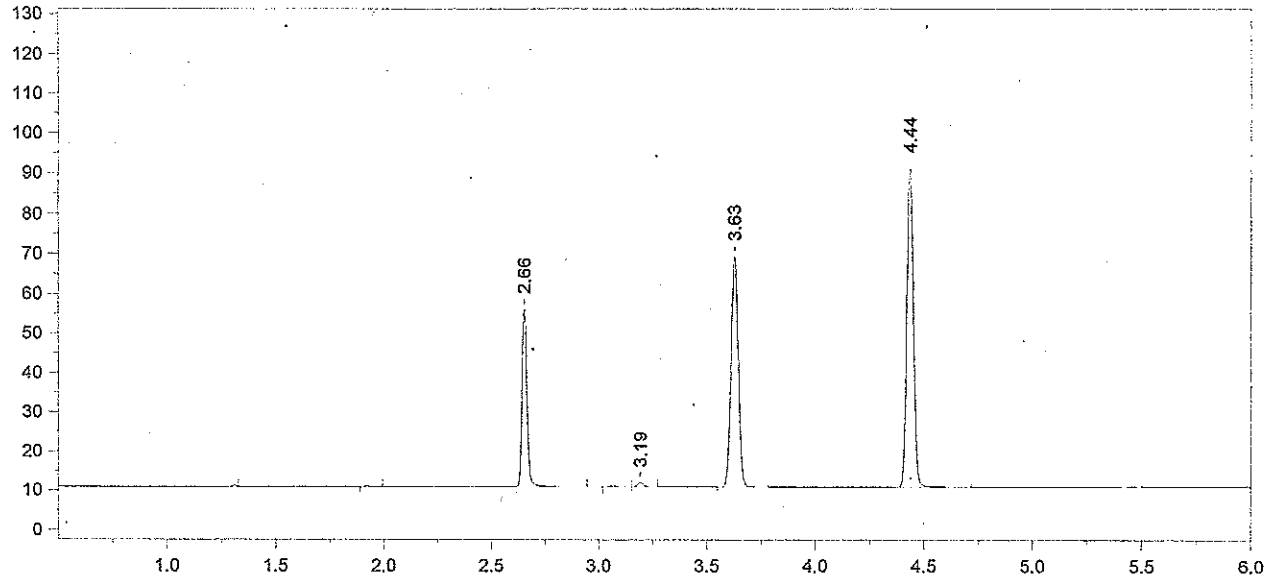
Format File Name = AlcoholVFL.FMT

Today's Date = 6/26/2015
Today's Time = 8:11:50 AM
Bound File Name = VFL06252015.0007.RAW
Sample Name = STD E
Date Taken = 6/25/2015 5:17:03 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	425632	0.3999
4	3.63	t-Butanol	151895	0.9817
5	4.44	n-Propanol	203444	1.0000

15-11-020 Dans 11

AB 7/8/15



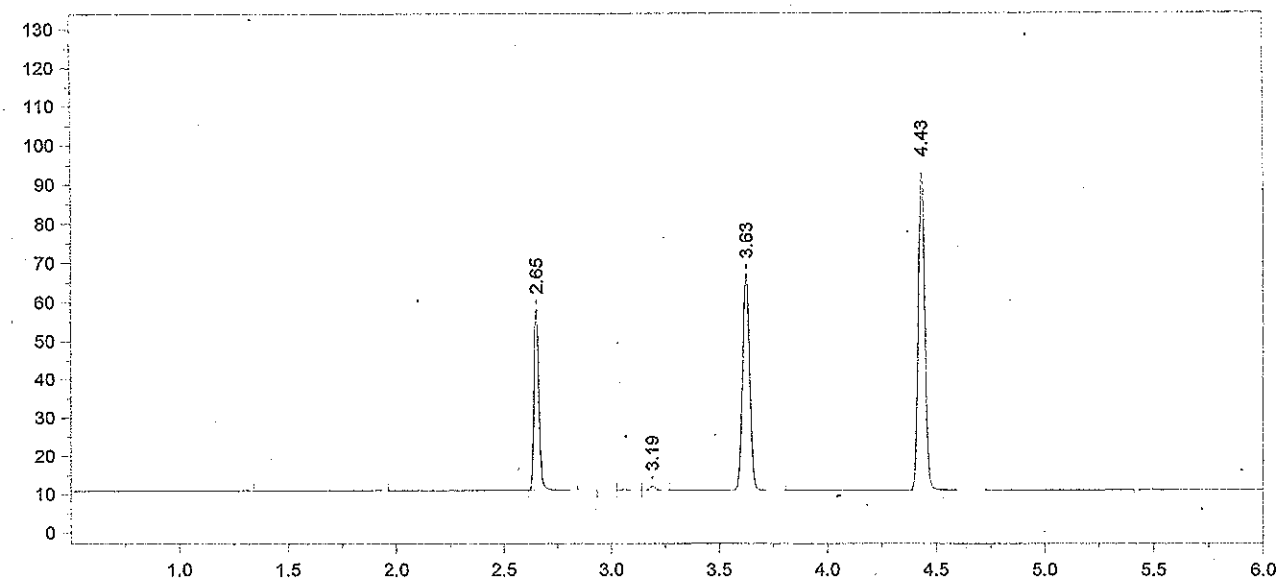
Format File Name = AlcoholVFL.FMT

Today's Date = 6/25/2015 Today's Time = 5:35:16 PM
Bound File Name = VFL06252015.0008.RAW
Sample Name = WB
Date Taken = 6/25/2015 5:35:10 PM VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.66	Ethanol	71005	0.0791
5	3.19	Isopropanol	02129	<0.004
6	3.63	t-Butanol	134563	1.0312
7	4.44	n-Propanol	171586	1.0000

AB 7/8/15

15-11-020 Page 12



Format File Name = AlcoholVFL.FMT

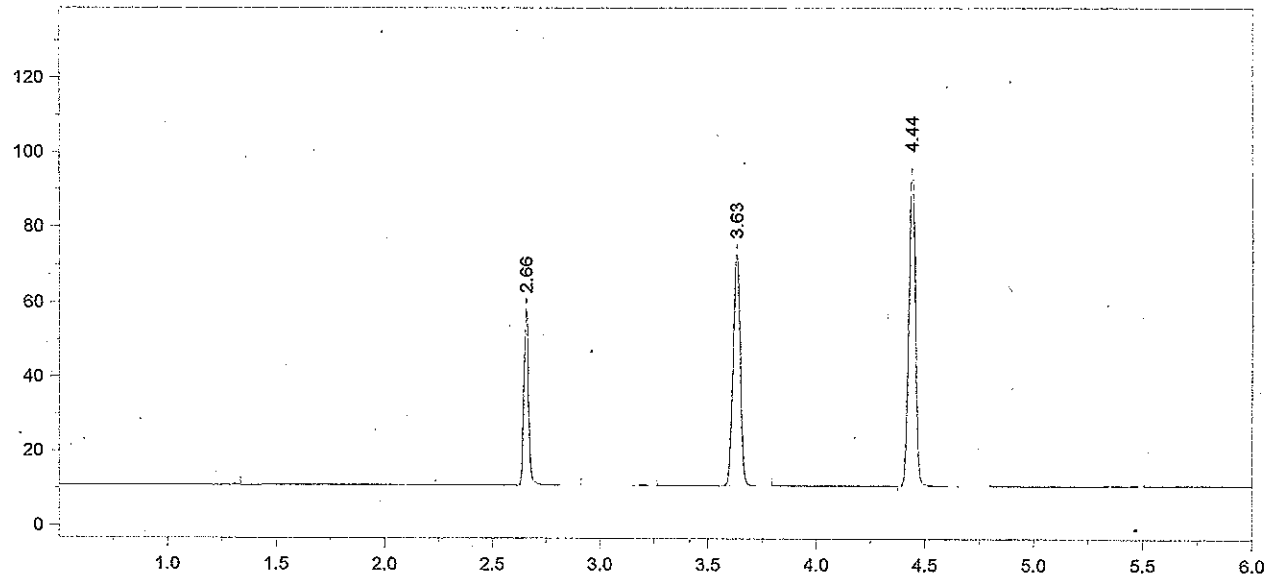
Today's Date = 6/25/2015
Today's Time = 5:50:13 PM
Bound File Name = VFL06252015.0009.RAW
Sample Name = WB
Date Taken = 6/25/2015 5:50:06 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	74187	0.0810
6	3.19	Isopropanol	02161	<0.004
7	3.63	t-Butanol	129749	0.9741
8	4.43	n-Propanol	175140	1.0000

Avg vals 8 & 9 = 0.0800
±5% range = 0.0760 - 0.0840
recovery = 100%
AB 6/26/15

Ciniqa 1212090
AS 7/13/15

AB 7/8/15
15-11-020 plus 13



Format File Name = AlcoholVFL.FMT

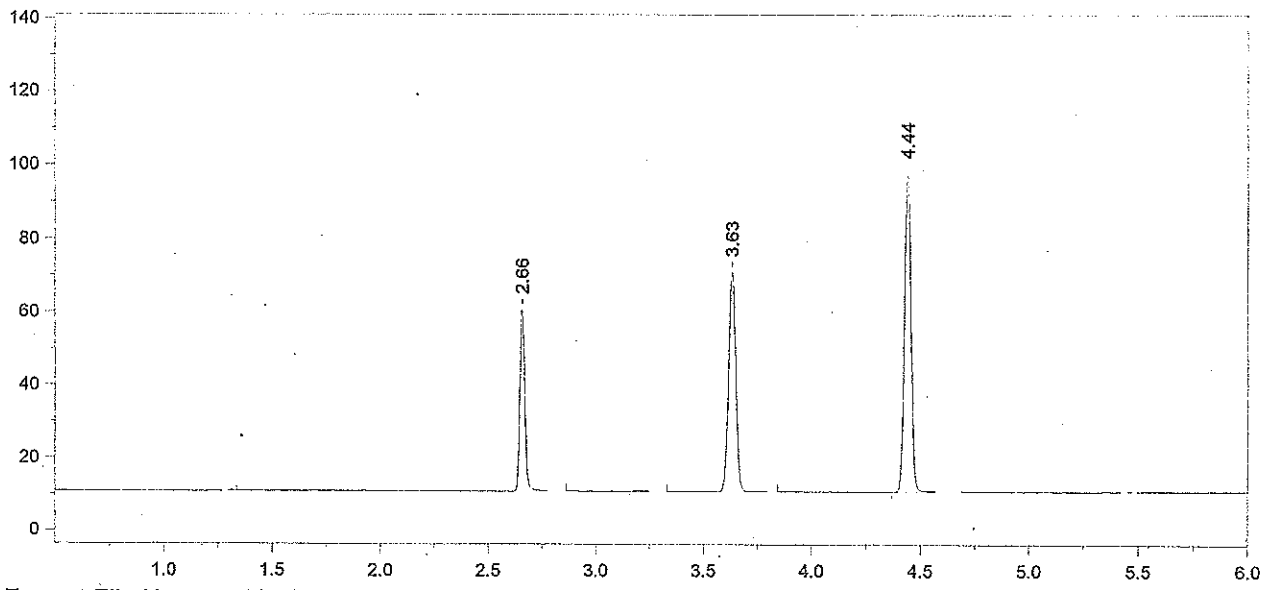
Today's Date = 6/25/2015
Today's Time = 6:06:43 PM
Bound File Name = VFL06252015.0010.RAW
Sample Name = AQ
Date Taken = 6/25/2015 6:06:35 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	74139	0.0783
4	3.63	t-Butanol	144328	1.0490
5	4.44	n-Propanol	180900	1.0000

AB 7/8/15

15-11-020 Atch 14

DS



Format File Name = AlcoholVFL.FMT

Today's Date = 6/25/2015
Today's Time = 6:19:58 PM
Bound File Name = VFL06252015.0011.RAW
Sample Name = AQ
Date Taken = 6/25/2015 6:19:52 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

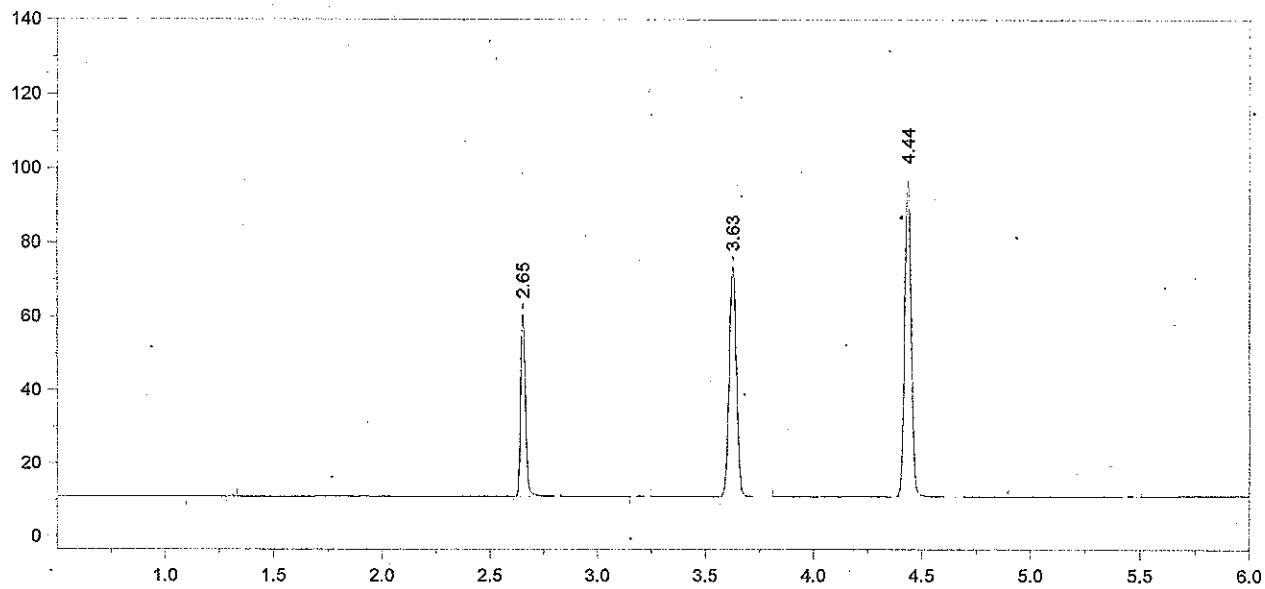
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.66	Ethanol	77353	0.0800
5	3.63	t-Butanol	138885	0.9883
6	4.44	n-Propanol	184778	1.0000

Cerilliant Lot # FN021111-03
TV = 0.080
Avg vals 10 + 11 = 0.0791
±5% range = 0.0751 - 0.0830
recovery = 98.7%

AB 6/26/15

AB 7/8/15

15-11-020 Page 15



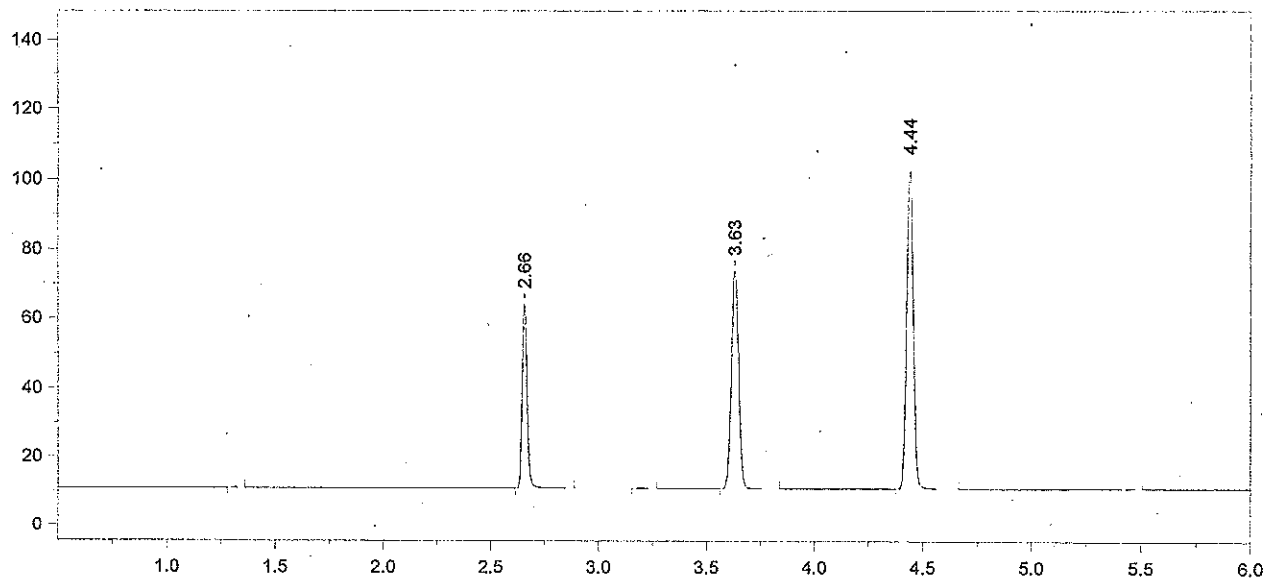
Format File Name = AlcoholVFL.FMT

Today's Date = 6/25/2015
Today's Time = 6:38:09 PM
Bound File Name = VFL06252015.0012.RAW
Sample Name = CCS
Date Taken = 6/25/2015 6:38:02 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	76900	0.0800
4	3.63	t-Butanol	145157	1.0389
5	4.44	n-Propanol	183722	1.0000

AB 7/8/15

15-11-00 Atric 16



Format File Name = AlcoholVFL.FMT

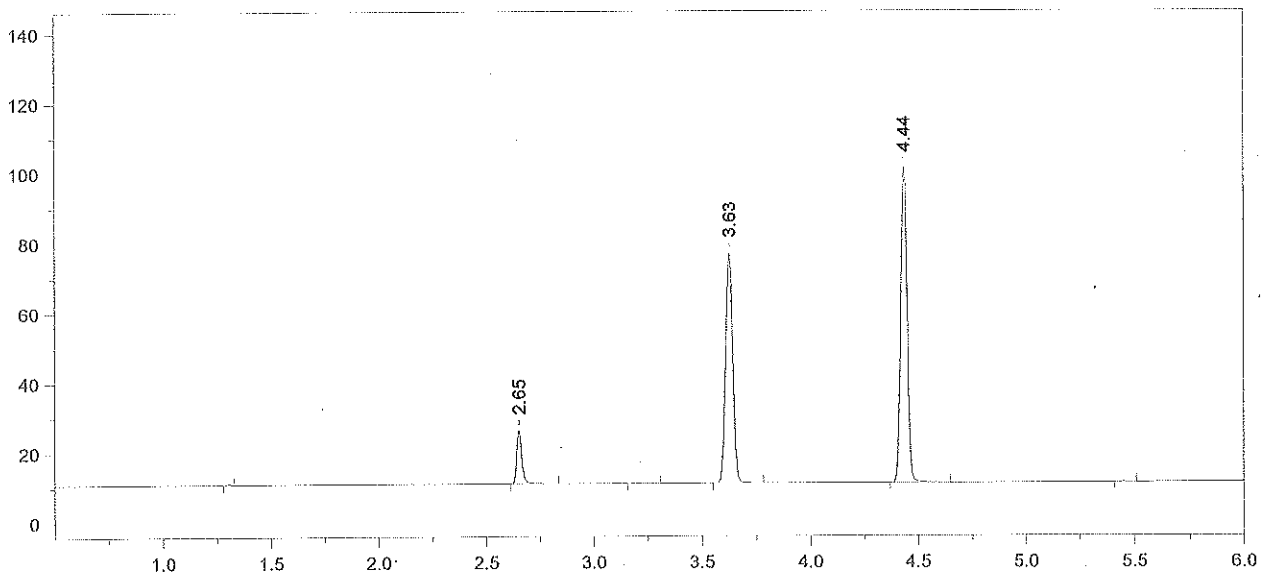
Today's Date = 6/25/2015
Today's Time = 6:51:24 PM
Bound File Name = VFL06252015.0013.RAW
Sample Name = CCS
Date Taken = 6/25/2015 6:51:20 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	82684	0.0813
4	3.63	t-Butanol	146083	0.9880
5	4.44	n-Propanol	194420	1.0000

Avg vals 12 + 13 = 0.0806
± 5% range = 0.0766 - 0.0846
recovery = 100% 6/26/15 AB

AB 7/8/15

15-11-020 page 17



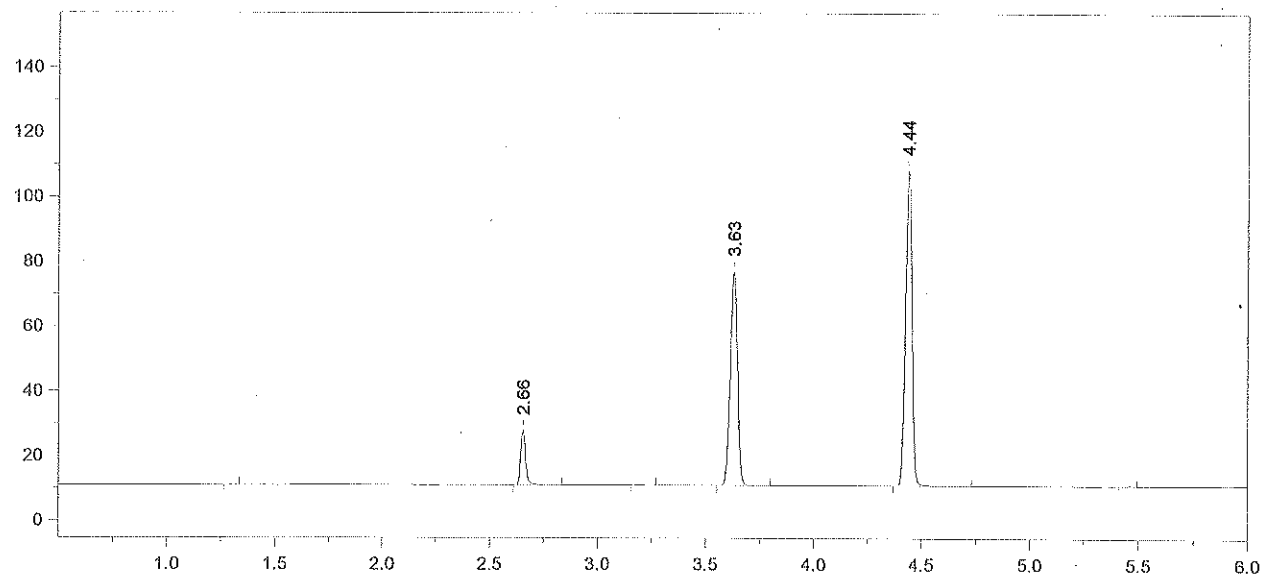
Format File Name = simsolnVFL.met.FMT

Today's Date = 6/25/2015
Today's Time = 7:39:18 PM
Bound File Name = VFL06252015.0016.RAW
Sample Name = .02 DP
Date Taken = 6/25/2015 7:39:12 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	24551	0.0245	0.0200
4	3.63	t-Butanol	151773	1.0406	0.8494
5	4.44	n-Propanol	191771	1.0000	0.8162

AB 7/8/15

15-11-020 PAGE 18



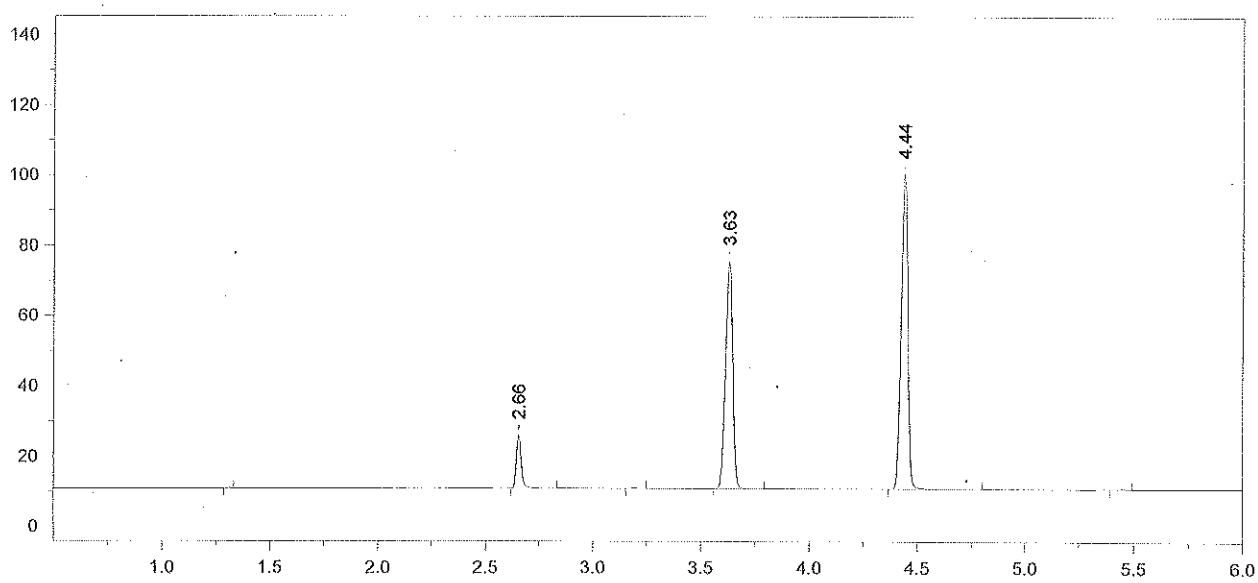
Format File Name = simsolnVFL.met.FMT

Today's Date = 6/25/2015
Today's Time = 7:54:47 PM
Bound File Name = VFL06252015.0017.RAW
Sample Name = .02 DP
Date Taken = 6/25/2015 7:54:41 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	26827	0.0248	0.0202
4	3.63	t-Butanol	153321	0.9731	0.7942
5	4.44	n-Propanol	207179	1.0000	0.8162

AB 7/8/15

15-11-020 Page 19



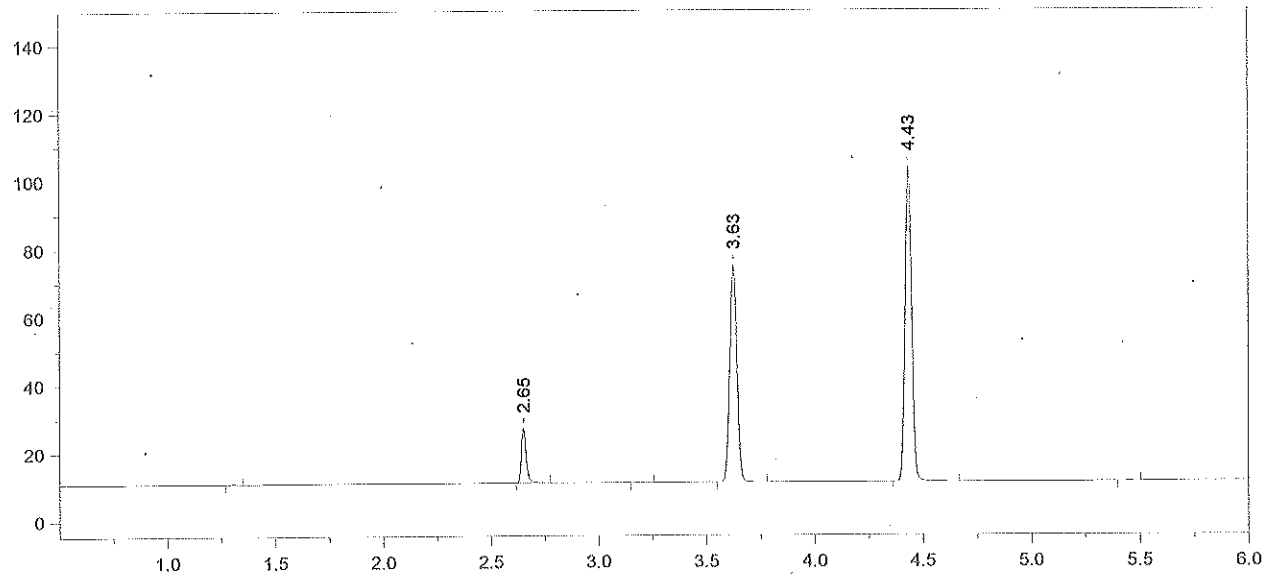
Format File Name = simsolnVFL.met.FMT

Today's Date = 6/25/2015
Today's Time = 8:10:48 PM
Bound File Name = VFL06252015.0018.RAW
Sample Name = .02 DP
Date Taken = 6/25/2015 8:10:44 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	24280	0.0243	0.0198
4	3.63	t-Butanol	150495	1.0348	0.8446
5	4.44	n-Propanol	191222	1.0000	0.8162

AB 7/8/15

19-11-020 AME 20

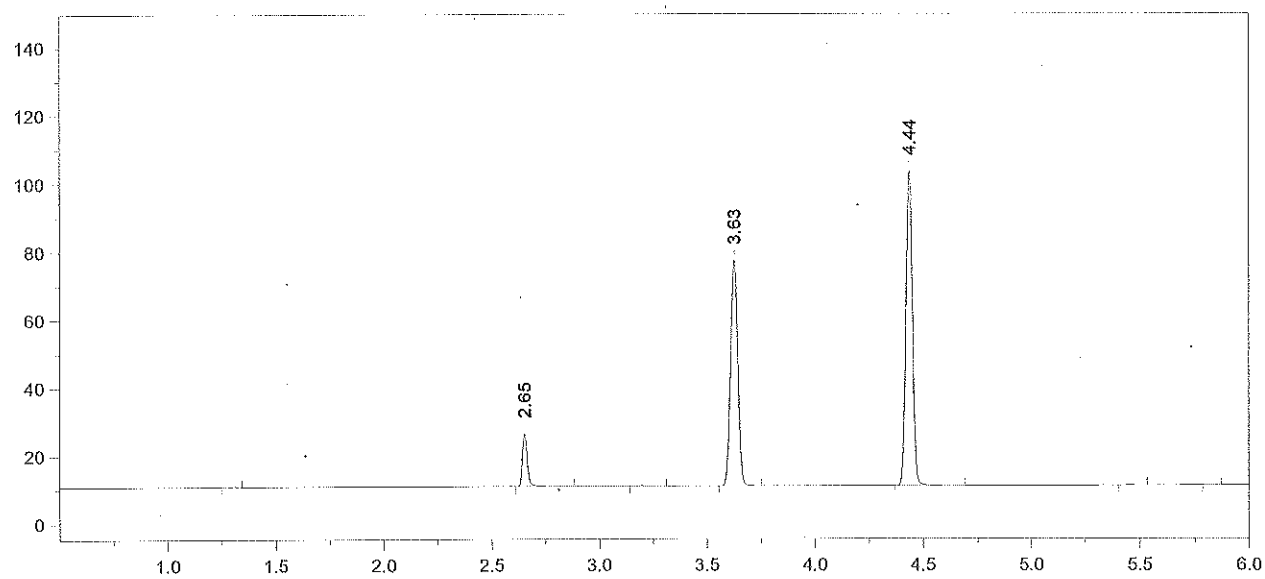


Format File Name = simsolnVFL.met.FMT

Today's Date = 6/25/2015
Today's Time = 8:26:13 PM
Bound File Name = VFL06252015.0019.RAW
Sample Name = .02 DP
Date Taken = 6/25/2015 8:26:05 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	25402	0.0246	0.0201
4	3.63	t-Butanol	147625	0.9851	0.8040
5	4.43	n-Propanol	197047	1.0000	0.8162

AB 7/8/15
1911-020 Page 21



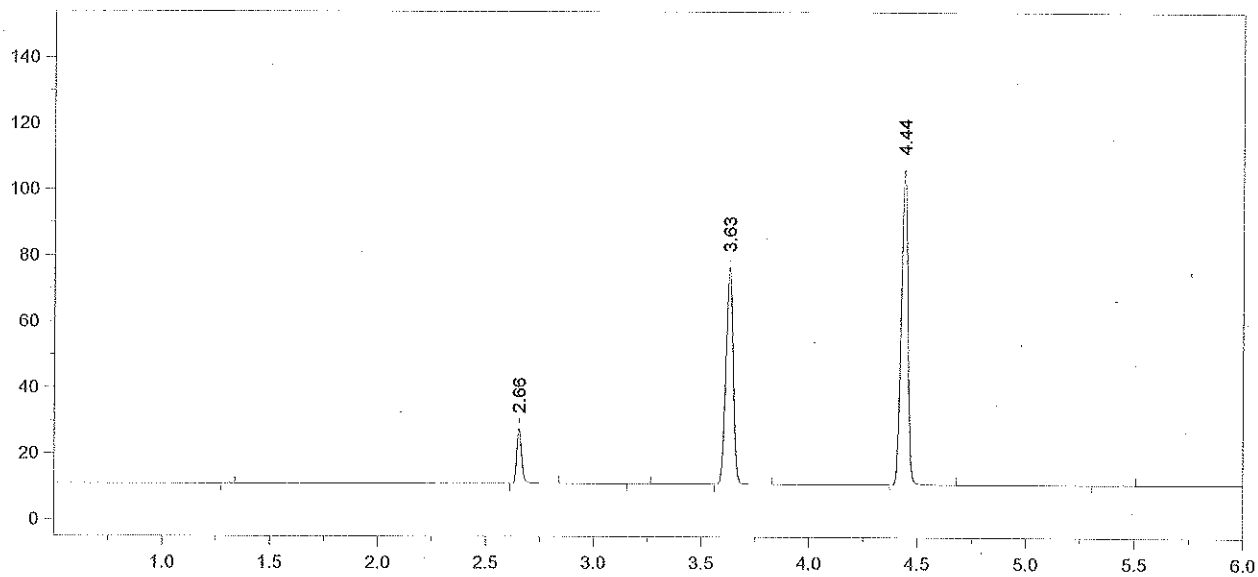
Format File Name = simsolnVFL.met.FMT

Today's Date = 6/25/2015
Today's Time = 8:40:36 PM
Bound File Name = VFL06252015.0020.RAW
Sample Name = .02 DP
Date Taken = 6/25/2015 8:40:28 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	25083	0.0244	0.0199
4	3.63	t-Butanol	153359	1.0267	0.8380
5	4.44	n-Propanol	196400	1.0000	0.8162

15-11-020 Page 22

JB 7/8/15



Format File Name = simsolnVFL.met.FMT

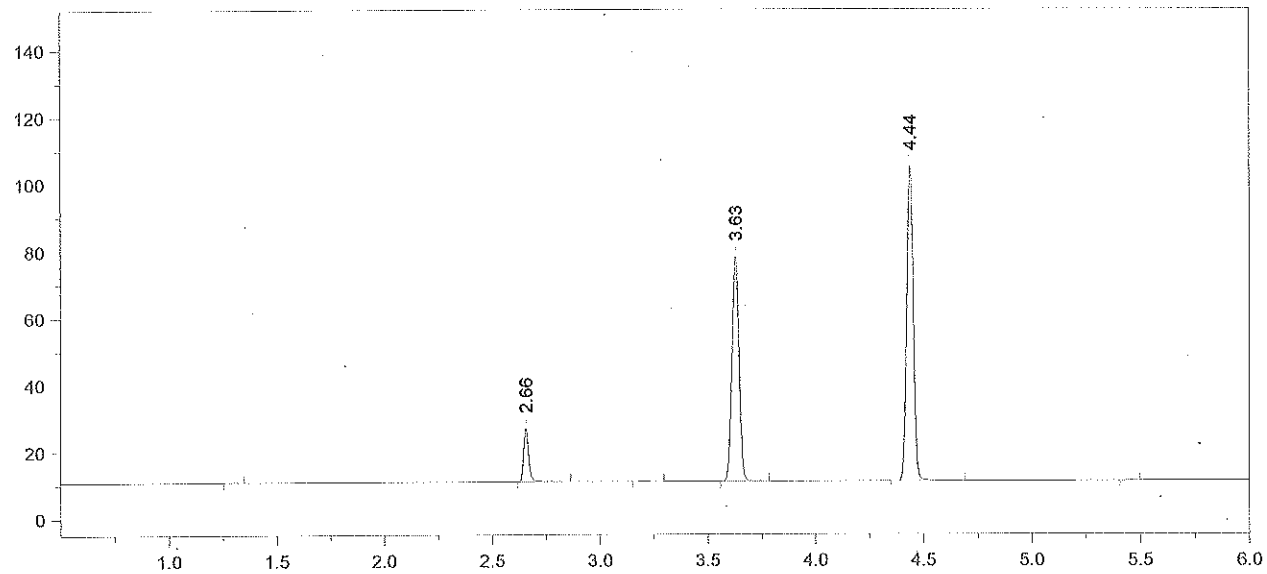
Today's Date = 6/25/2015
Today's Time = 8:57:35 PM
Bound File Name = VFL06252015.0021.RAW
Sample Name = .02 DP
Date Taken = 6/25/2015 8:57:29 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	26475	0.0247	0.0202
4	3.63	t-Butanol	152035	0.9773	0.7977
5	4.44	n-Propanol	204540	1.0000	0.8162

AB 7/8/15

15-11-010 Page 23

AR



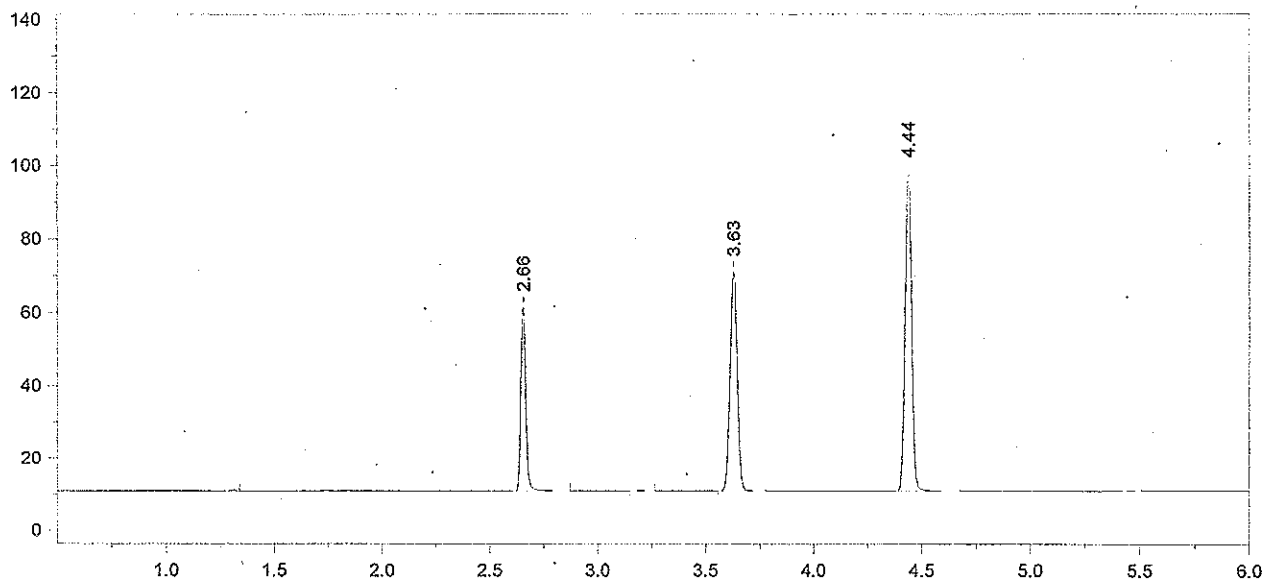
Format File Name = simsolnVFL.met.FMT

Today's Date = 6/25/2015
Today's Time = 9:10:52 PM
Bound File Name = VFL06252015.0022.RAW
Sample Name = .02 DP
Date Taken = 6/25/2015 9:10:47 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	25450	0.0243	0.0198
4	3.63	t-Butanol	155846	1.0231	0.8350
5	4.44	n-Propanol	200300	1.0000	0.8162

15-11-020 page 24

AB 7/8/15



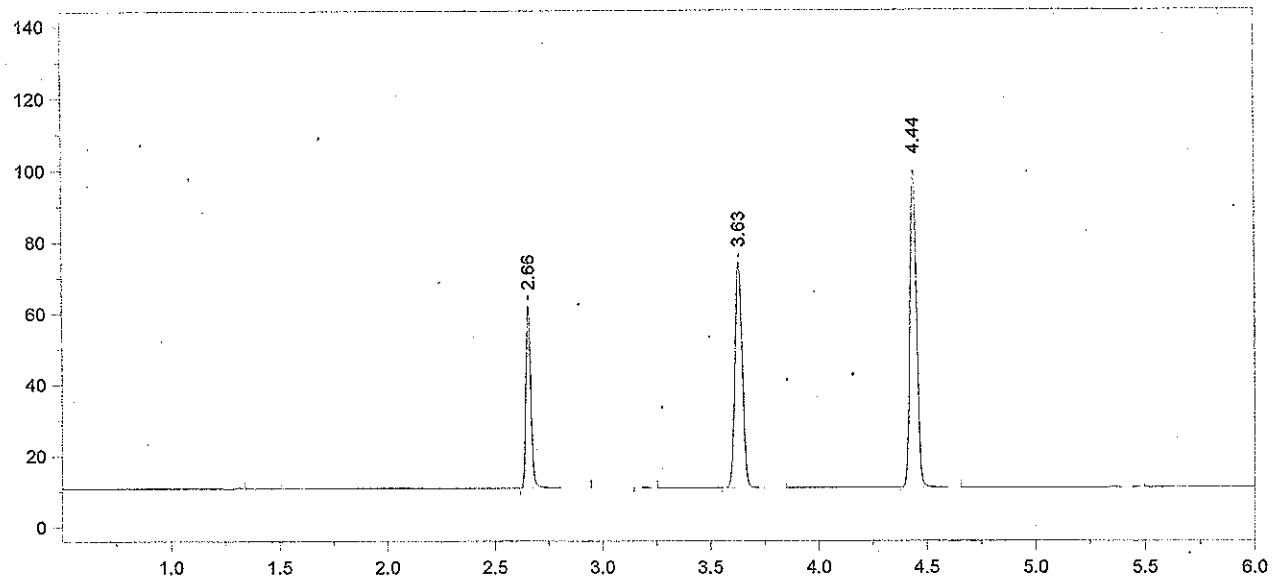
Format File Name = AlcoholVFL.FMT

Today's Date = 6/25/2015
Today's Time = 9:28:04 PM
Bound File Name = VFL06252015.0023.RAW
Sample Name = CCS
Date Taken = 6/25/2015 9:27:58 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	78732	0.0814
4	3.63	t-Butanol	138679	0.9868
5	4.44	n-Propanol	184781	1.0000

AB 7/8/15

15-11-020 page 26



Format File Name = AlcoholVFL.FMT

Today's Date = 6/25/2015
Today's Time = 9:43:55 PM
Bound File Name = VFL06252015.0024.RAW
Sample Name = CCS
Date Taken = 6/25/2015 9:43:49 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

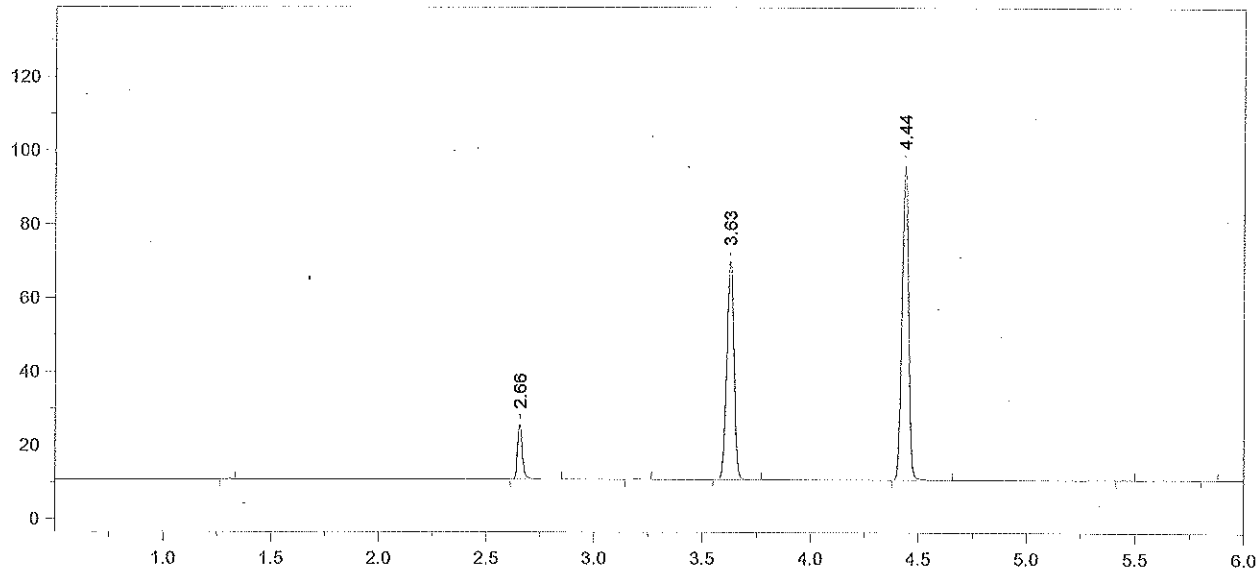
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	79716	0.0810
4	3.63	t-Butanol	146577	1.0239
5	4.44	n-Propanol	188230	1.0000

Avg vals 23 + 24 = 0.0812
± 5% range = 0.0771 - 0.0852
recovery = 101.2%

6/26/15 AB

AB 7/8/15

15-11-020 PAGE 26



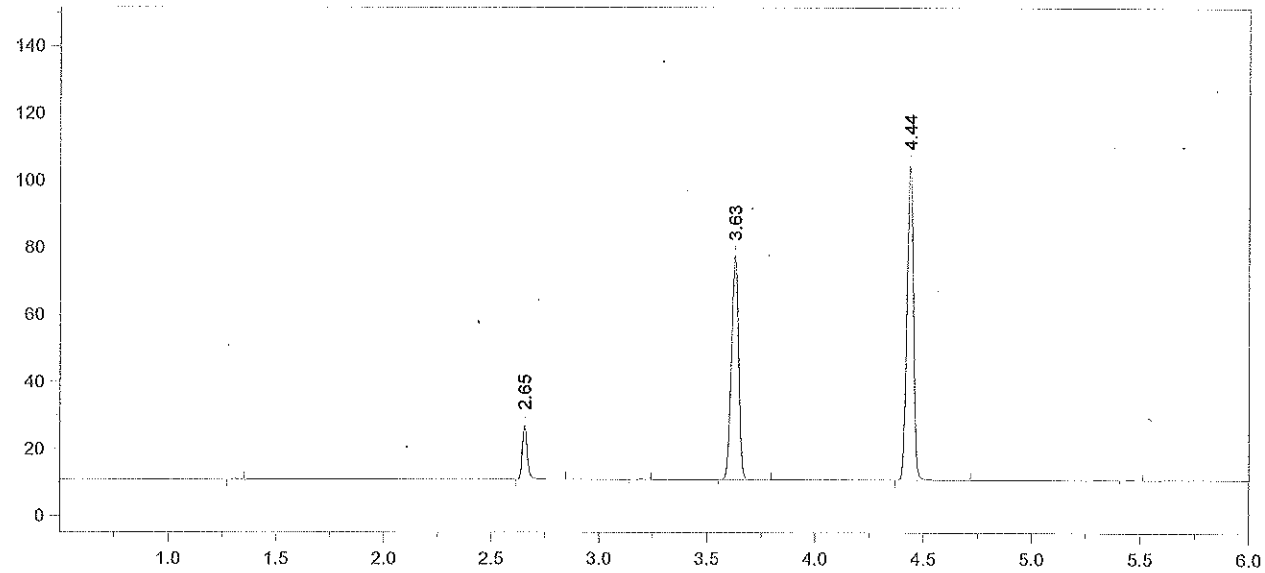
Format File Name = simsolnVFL.met.FMT

Today's Date = 6/25/2015
Today's Time = 9:59:30 PM
Bound File Name = VFL06252015.0025.RAW
Sample Name = .02 ALB
Date Taken = 6/25/2015 9:59:23 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	23890	0.0252	0.0206
4	3.63	t-Butanol	137639	1.0001	0.8163
5	4.44	n-Propanol	180956	1.0000	0.8162

15-11-020 AW527

AB 7/8/15



Format File Name = simsolnVFL.met.FMT

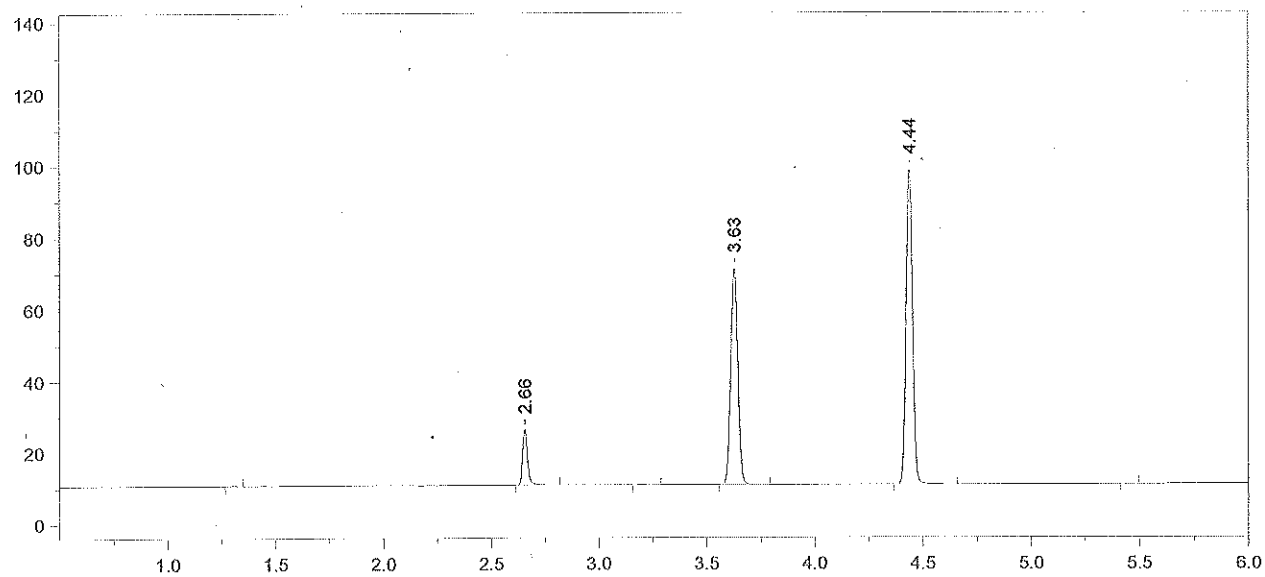
Today's Date = 6/25/2015
Today's Time = 10:13:41 PM
Bound File Name = VFL06252015.0026.RAW
Sample Name = .02 ALB
Date Taken = 6/25/2015 10:13:34 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	25820	0.0248	0.0202
4	3.63	t-Butanol	155297	1.0264	0.8377
5	4.44	n-Propanol	198953	1.0000	0.8162

1571-020 Page 28

AB 7/8/15

Chrom Perfect Chromatogram Report



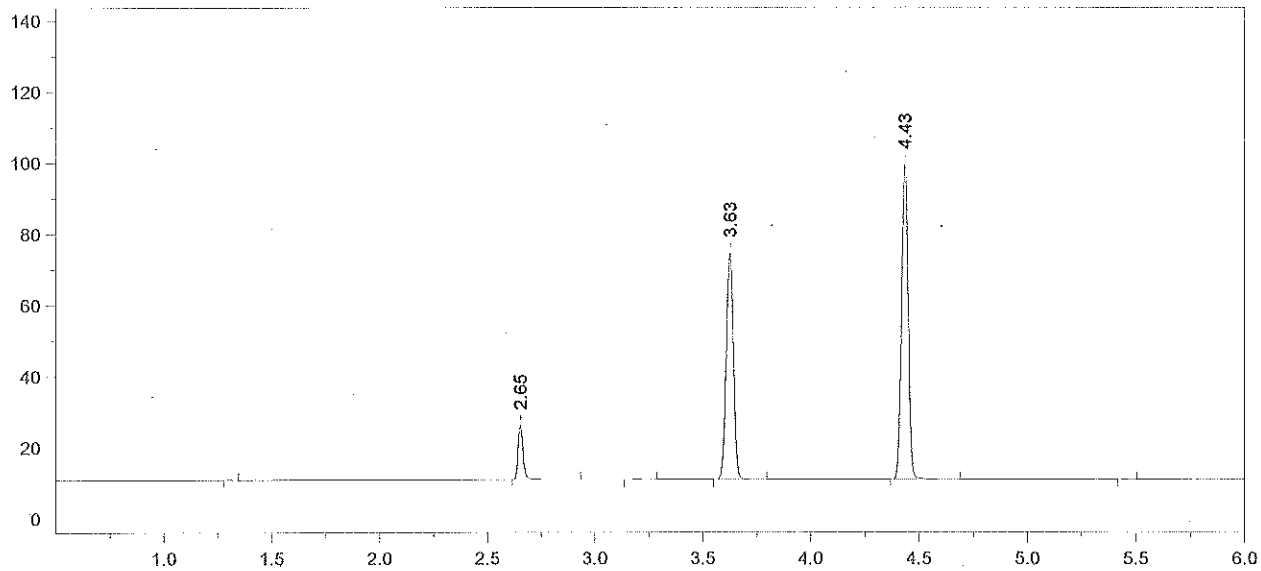
Format File Name = simsolnVFL.met.FMT

Today's Date = 6/25/2015
Today's Time = 10:29:16 PM
Bound File Name = VFL06252015.0027.RAW
Sample Name = .02 ALB
Date Taken = 6/25/2015 10:29:12 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	24661	0.0252	0.0205
4	3.63	t-Butanol	139329	0.9784	0.7986
5	4.44	n-Propanol	187241	1.0000	0.8162

15-11-020 page 29

AB 7/8/15



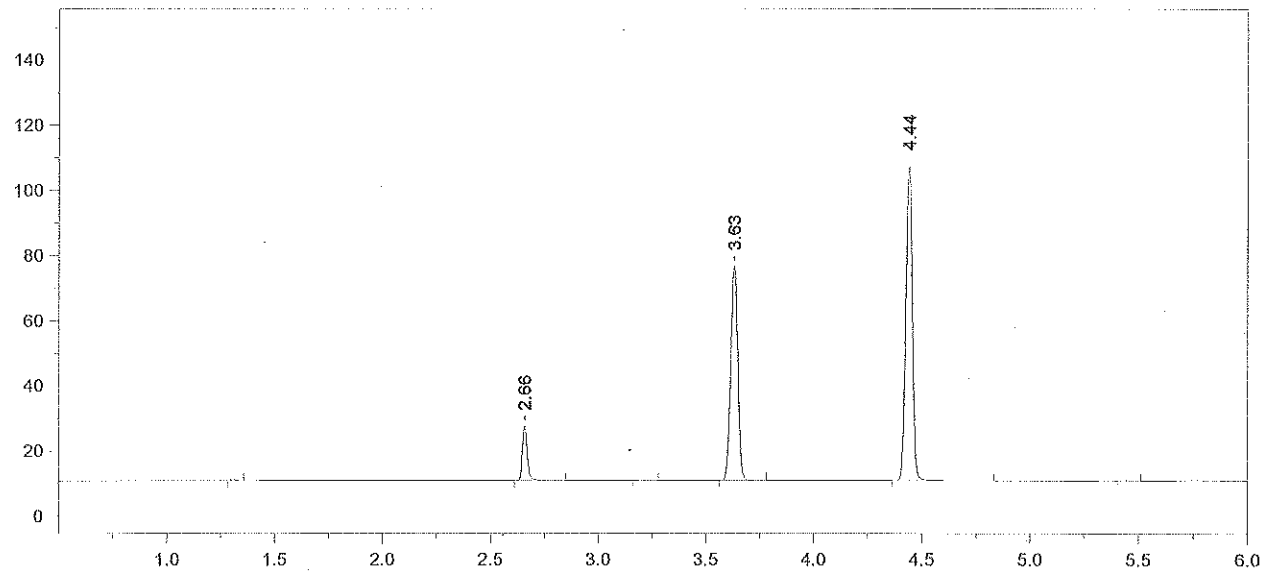
Format File Name = simsolnVFL.met.FMT

Today's Date = 6/25/2015
Today's Time = 10:45:47 PM
Bound File Name = VFL06252015.0028.RAW
Sample Name = .02 ALB
Date Taken = 6/25/2015 10:45:43 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	24750	0.0252	0.0206
4	3.63	t-Butanol	147632	1.0332	0.8433
5	4.43	n-Propanol	187882	1.0000	0.8162

15-11-020 Pg 30

AB 7/8/15



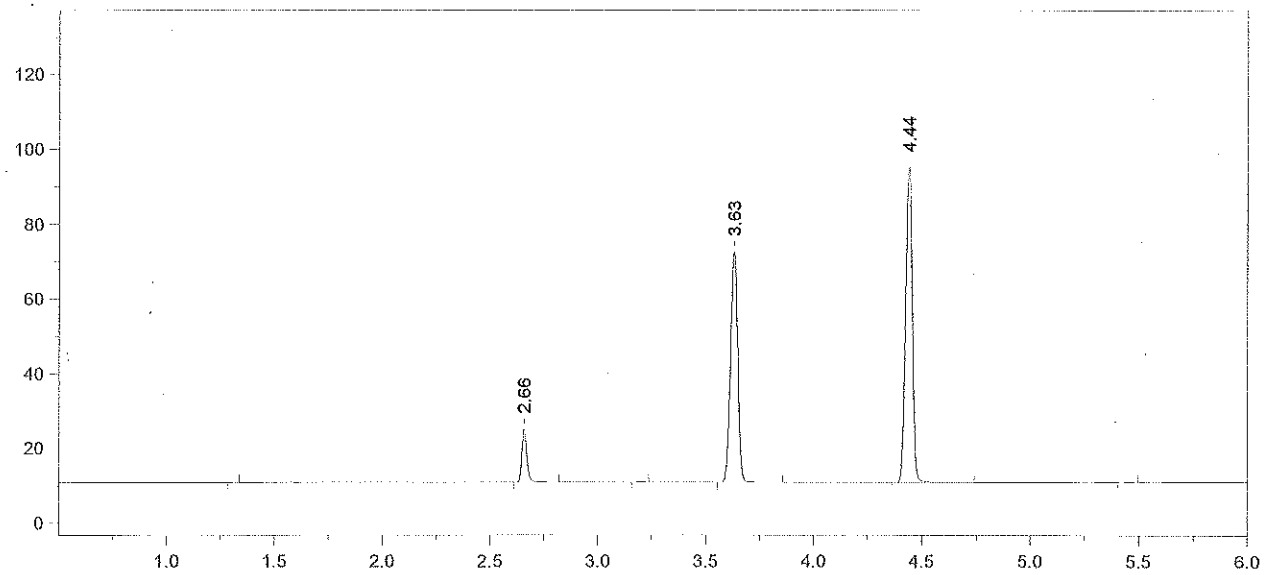
Format File Name = simsolnVFL.met.FMT

Today's Date = 6/25/2015 Today's Time = 10:59:47 PM
Bound File Name = VFL06252015.0029.RAW
Sample Name = .02 ALB
Date Taken = 6/25/2015 10:59:43 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL06252015.CAL Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	26758	0.0249	0.0203
4	3.63	t-Butanol	152690	0.9760	0.7966
5	4.44	n-Propanol	205709	1.0000	0.8162

AB 7/8/15

15-11-020 PAGE 31



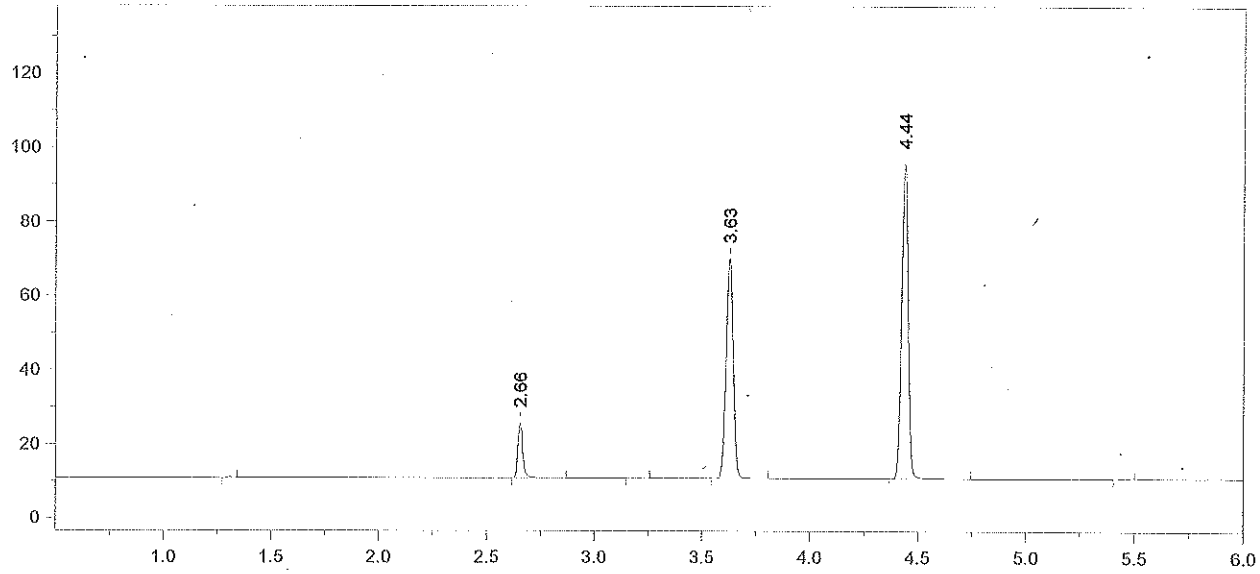
Format File Name = simsolnVFL.met.FMT

Today's Date = 6/25/2015
Today's Time = 11:17:18 PM
Bound File Name = VFL06252015.0030.RAW
Sample Name = .02 ALB
Date Taken = 6/25/2015 11:17:10 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	22880	0.0243	0.0199
4	3.63	t-Butanol	143334	1.0481	0.8555
5	4.44	n-Propanol	179810	1.0000	0.8162

AB 7/8/15

15-11-020 pg 32



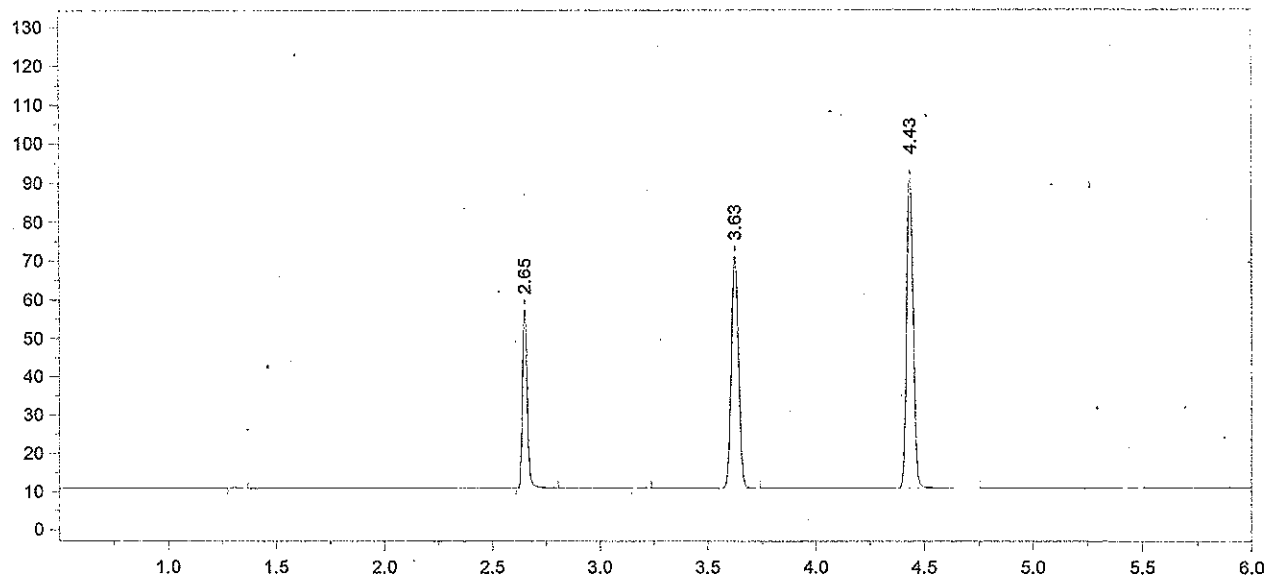
Format File Name = simsolnVFL.met.FMT

Today's Date = 6/25/2015
Today's Time = 11:31:07 PM
Bound File Name = VFL06252015.0031.RAW
Sample Name = .02 ALB
Date Taken = 6/25/2015 11:30:58 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	23778	0.0251	0.0205
4	3.63	t-Butanol	137184	0.9950	0.8121
5	4.44	n-Propanol	181283	1.0000	0.8162

AB 7/8/15

15-11-020 PA533



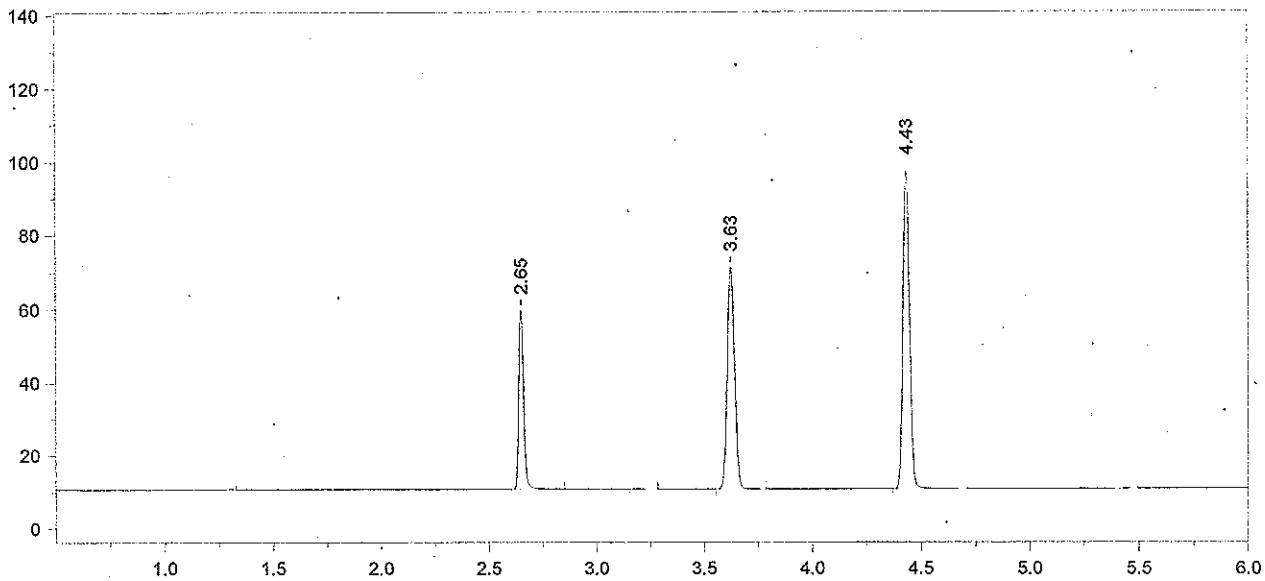
Format File Name = AlcoholVFL.FMT

Today's Date = 6/25/2015
Today's Time = 11:48:42 PM
Bound File Name = VFL06252015.0032.RAW
Sample Name = CCS
Date Taken = 6/25/2015 11:48:37 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	72263	0.0789
4	3.63	t-Butanol	138580	1.0406
5	4.43	n-Propanol	175098	1.0000

AB 7/8/15

15-11-020 AB 34



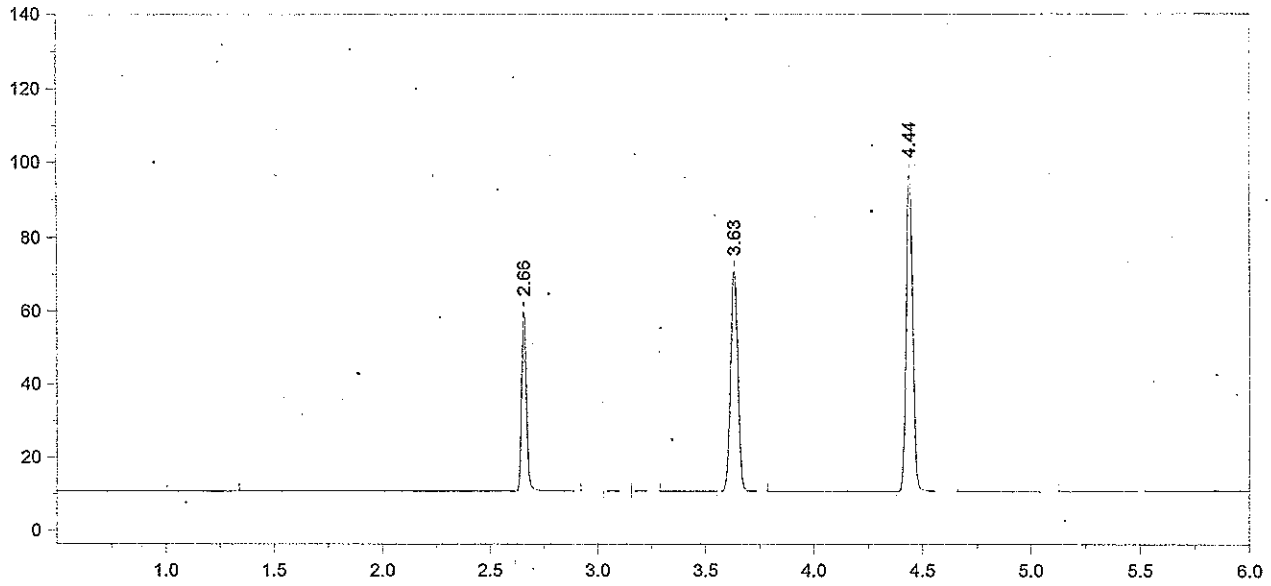
Format File Name = AlcoholVFL.FMT

Today's Date = 6/26/2015
Today's Time = 12:02:39 AM
Bound File Name = VFL06252015.0033.RAW
Sample Name = CCS
Date Taken = 6/26/2015 12:02:35 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	76516	0.0794
4	3.63	t-Butanol	139879	0.9982
5	4.43	n-Propanol	184263	1.0000

Avg vals 32 + 33 = 0.0791
±5% range = 0.0751 - 0.0830
recovery = 98.7%
6/26/15 AB

AB 7/8/15
15-11-020 Page 35



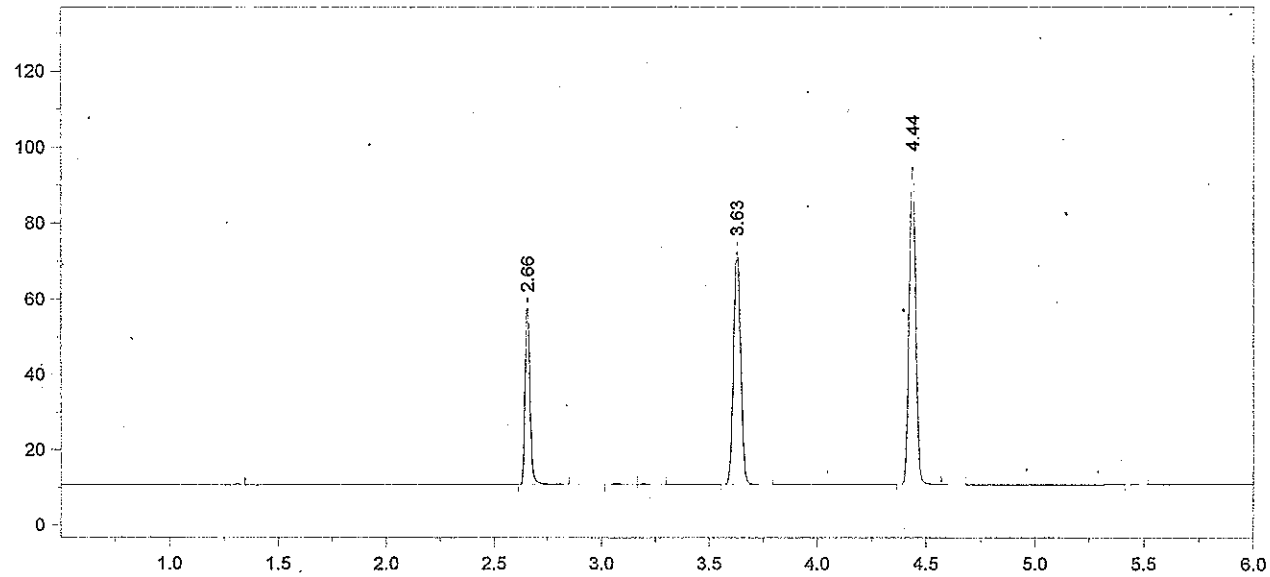
Format File Name = AlcoholVFL.FMT

Today's Date = 6/26/2015
Today's Time = 2:08:25 AM
Bound File Name = VFL06252015.0041.RAW
Sample Name = CCS
Date Taken = 6/26/2015 2:08:20 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	76688	0.0800
5	3.63	t-Butanol	138805	0.9956
6	4.44	n-Propanol	183319	1.0000

AB 7/8/15

15-11-020 Page 36



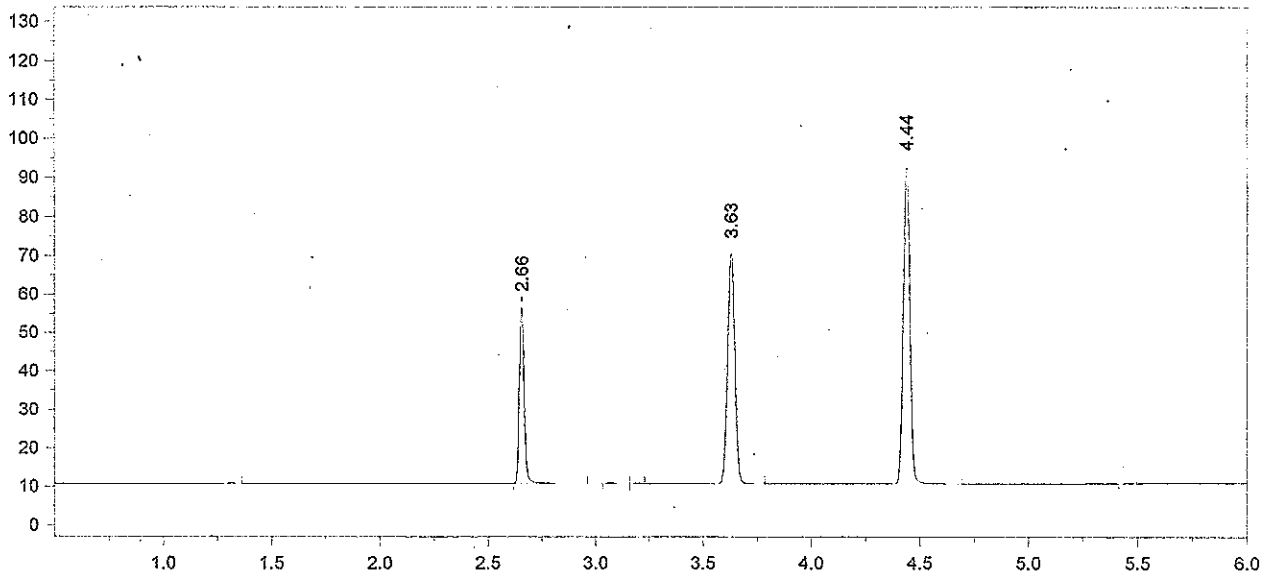
Format File Name = AlcoholVFL.FMT

Today's Date = 6/26/2015
Today's Time = 2:26:00 AM
Bound File Name = VFL06252015.0042.RAW
Sample Name = CCS
Date Taken = 6/26/2015 2:25:53 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	73570	0.0784
5	3.63	t-Butanol	142269	1.0429
6	4.44	n-Propanol	179367	1.0000

Avg vals Y1 + Y2 = 0.0792
± 5% range = 0.0752 - 0.0831
recovery = 98.7%
6/26/15 AB

AB 7/8/15
15-11-020 Ph 57



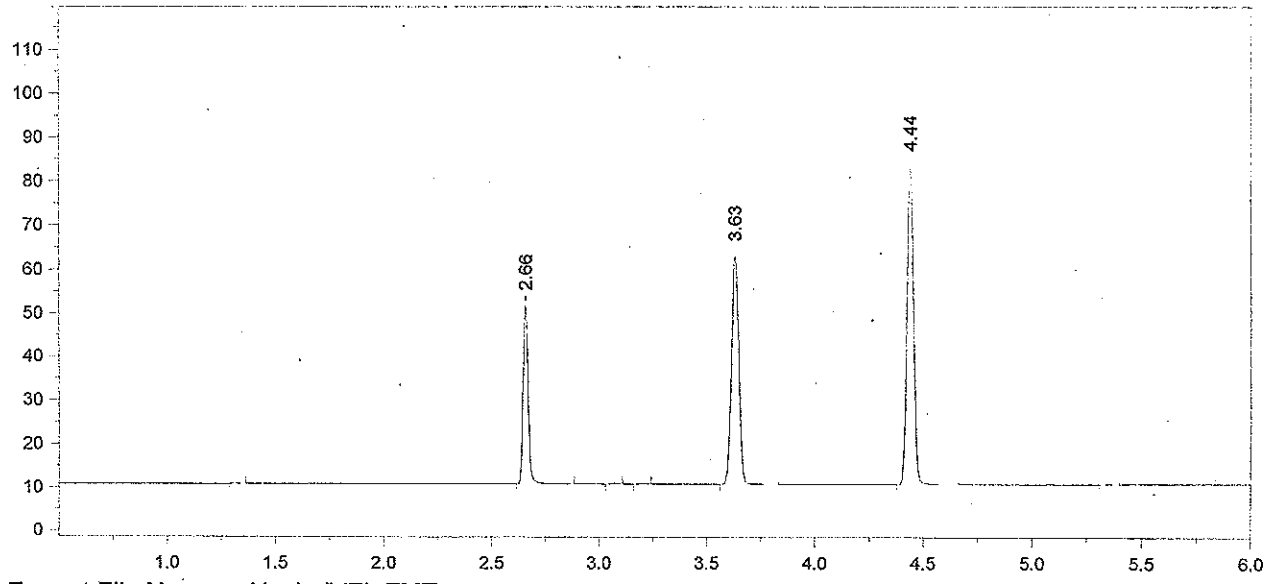
Format File Name = AlcoholVFL.FMT

Today's Date = 6/26/2015
Today's Time = 4:30:15 AM
Bound File Name = VFL06252015.0050.RAW
Sample Name = CCS
Date Taken = 6/26/2015 4:30:08 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	71541	0.0785
5	3.63	t-Butanol	138157	1.0424
6	4.44	n-Propanol	174265	1.0000

AB 7/8/15

15-11-020 Blue 38



Format File Name = AlcoholVFL.FMT

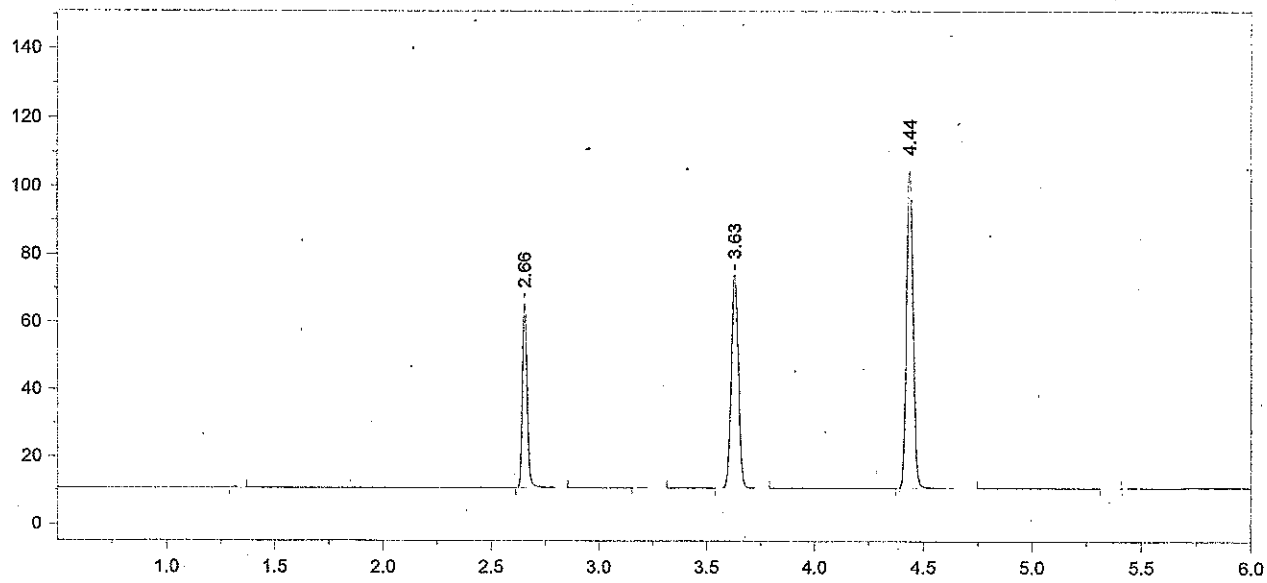
Today's Date = 6/26/2015
Today's Time = 4:44:07 AM
Bound File Name = VFL06252015.0051.RAW
Sample Name = CCS
Date Taken = 6/26/2015 4:43:59 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	63827	0.0788
5	3.63	t-Butanol	121114	1.0285
6	4.44	n-Propanol	154833	1.0000

Avg vals 50 + 51 = 0.0786
± 5% = 0.0747 - 0.0825
recovery = 97.5%

6/26/15 AB

AB 7/8/15
15-11-020 Atu 39



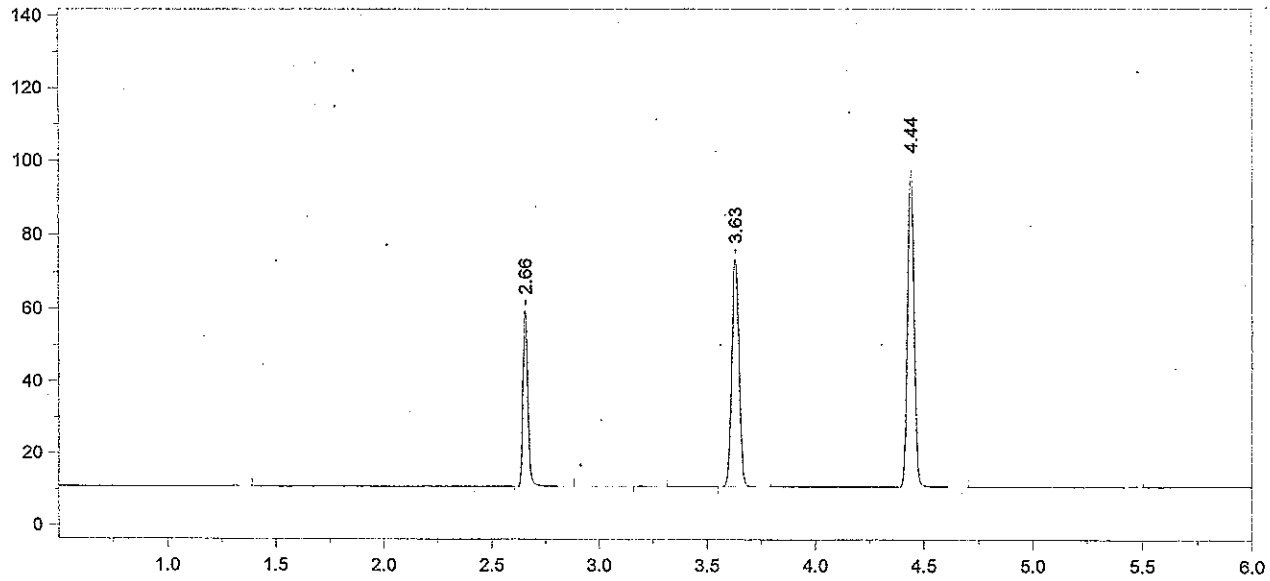
Format File Name = AlcoholVFL.FMT

Today's Date = 6/26/2015
Today's Time = 9:06:29 AM
Bound File Name = VFL06252015.0052.RAW
Sample Name = CCS 06262015
Date Taken = 6/26/2015 9:06:24 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	84225	0.0806
4	3.63	t-Butanol	145361	0.9565
5	4.44	n-Propanol	199832	1.0000

7/8/15

15-11-020 Otw 40



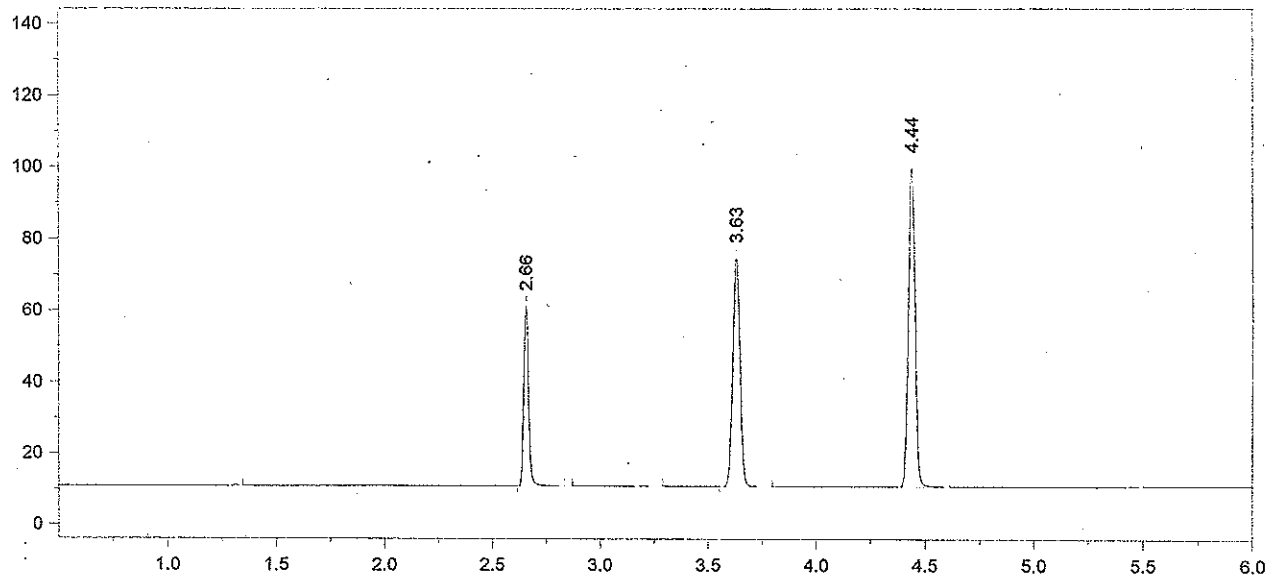
Format File Name = AlcoholVFL.FMT

Today's Date = 6/26/2015
Today's Time = 9:23:41 AM
Bound File Name = VFL06252015.0053.RAW
Sample Name = CCS
Date Taken = 6/26/2015 9:23:33 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	75800	0.0783
4	3.63	t-Butanol	145253	1.0326
5	4.44	n-Propanol	184962	1.0000

Avg vials 52 + 53 = 0.0794
±5% range 0.0754 - 0.0834
recovery = 98.7%

AB 7/8/15
15-11-020 Page 41



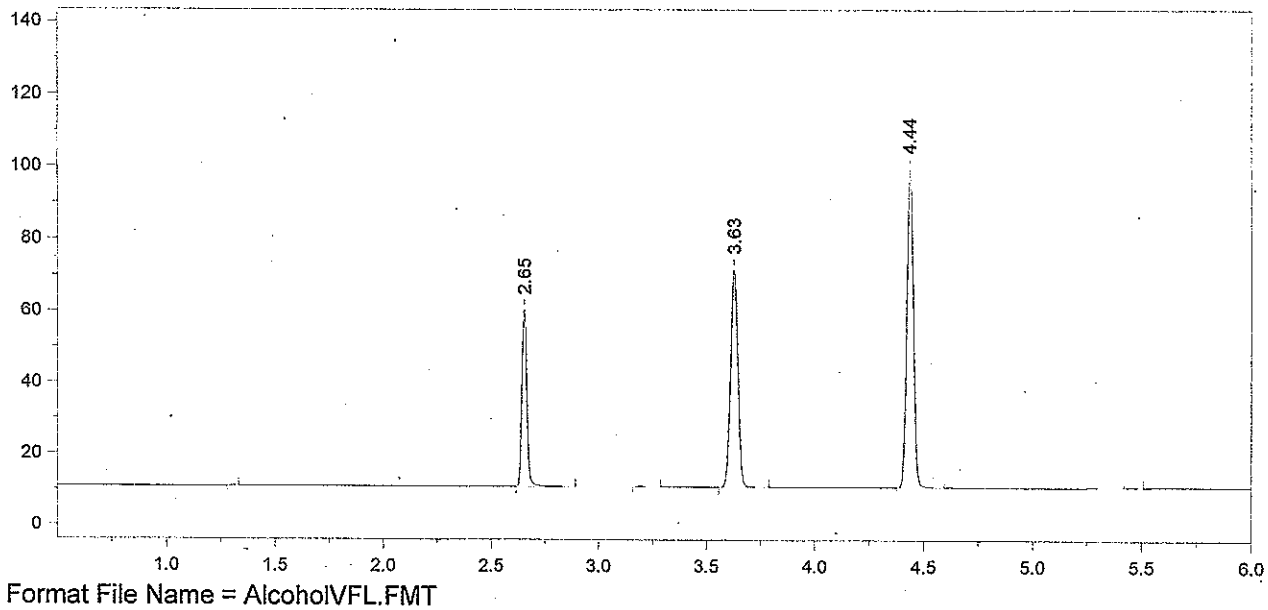
Format File Name = AlcoholVFL.FMT

Today's Date = 6/26/2015
Today's Time = 11:29:18 AM
Bound File Name = VFL06252015.0061.RAW
Sample Name = CCS
Date Taken = 6/26/2015 11:29:10 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	78052	0.0794
4	3.63	t-Butanol	148115	1.0360
5	4.44	n-Propanol	187984	1.0000

AB 7/8/15

17-11-020 PAGE 42



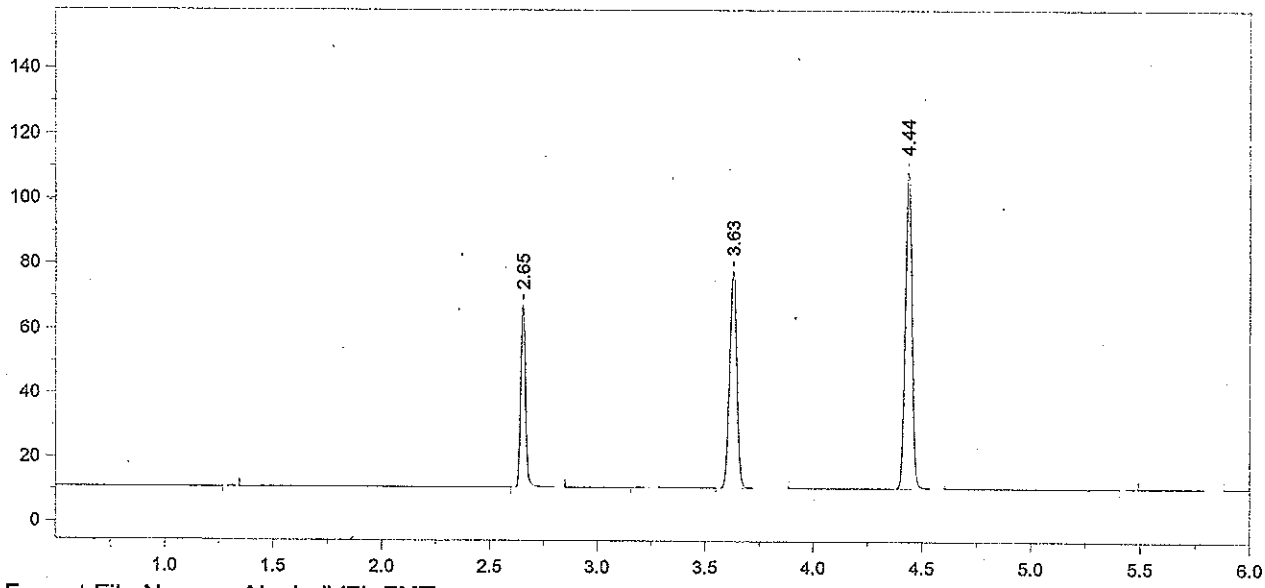
Format File Name = AlcoholVFL.FMT

Today's Date = 6/26/2015
Today's Time = 11:43:23 AM
Bound File Name = VFL06252015.0062.RAW
Sample Name = CCS
Date Taken = 6/26/2015 11:43:15 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	78136	0.0797
4	3.63	t-Butanol	140619	0.9872
5	4.44	n-Propanol	187284	1.0000

Avg vals b1 + b2 = 0.0795
±5% range = 0.0755 – 0.0835
recovery = 98.7%
6/26/15 AB

AB 7/8/15
15-11-020 AB 4B



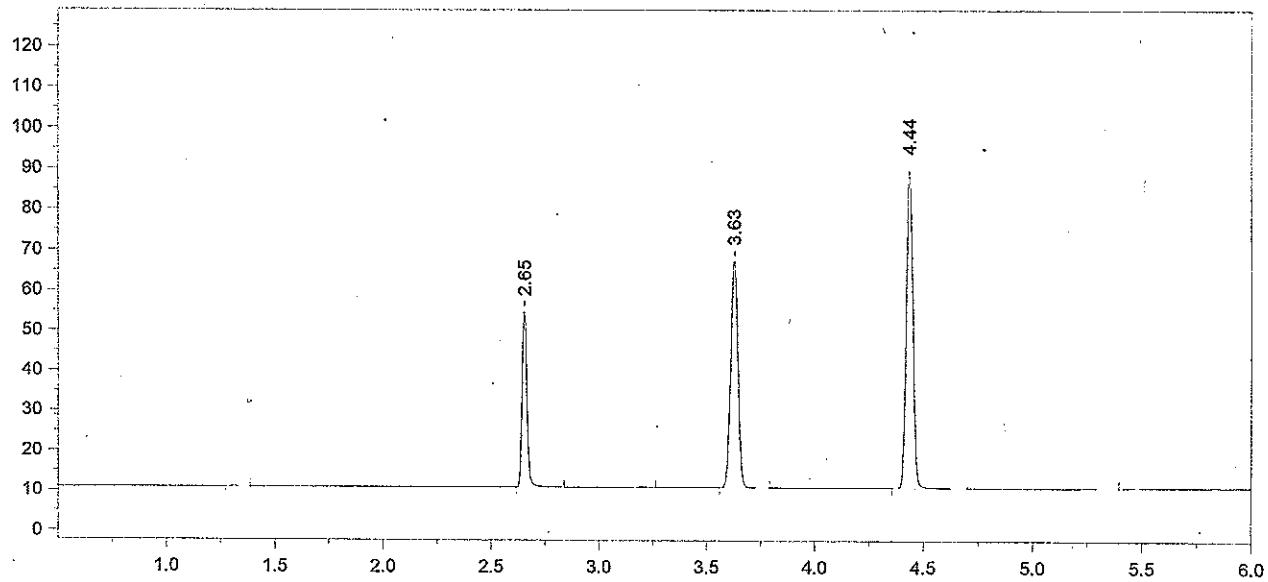
Format File Name = AlcoholVFL.FMT

Today's Date = 6/26/2015
Today's Time = 1:49:45 PM
Bound File Name = VFL06252015.0070.RAW
Sample Name = CCS
Date Taken = 6/26/2015 1:49:41 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	87639	0.0804
4	3.63	t-Butanol	155346	0.9808
5	4.44	n-Propanol	208256	1.0000

AB 7/8/15

15-11-020 pg 44



Format File Name = AlcoholVFL.FMT

Today's Date = 6/26/2015
Today's Time = 2:06:16 PM
Bound File Name = VFL06252015.0071.RAW
Sample Name = CCS
Date Taken = 6/26/2015 2:06:09 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL06252015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	68525	0.0784
4	3.63	t-Butanol	130692	1.0289
5	4.44	n-Propanol	167024	1.0000

Avg Vals 70 + 71 = 0.0794
±5% range = 0.0754 – 0.0834
Recovery = 98.7% 6/26/15 AB

AB 7/8/15
17-11-020 Page 45

File Name = C:\Alcohol Data\VFL07082015\VFL07082015.SEQ
Version = 4
File Date = 7/9/2015 10:25:16 AM

Entry #	Raw File Name	Method File Name	Sample Name	Sample Wt.	Int. Std. Amount
1	VFL07082015.0001.raw	Blood Alc temp VFL.MET	BLANK	1.00	1.00
2	VFL07082015.0002.raw	Blood Alc temp VFL.MET	TMX	1.00	1.00
3	VFL07082015.0003.raw	Blood Alc temp VFL.MET	STD A	1.00	1.00
4	VFL07082015.0004.raw	Blood Alc temp VFL.MET	STD B	1.00	1.00
5	VFL07082015.0005.raw	Blood Alc temp VFL.MET	STD C	1.00	1.00
6	VFL07082015.0006.raw	Blood Alc temp VFL.MET	STD D	1.00	1.00
7	VFL07082015.0007.raw	Blood Alc temp VFL.MET	STD E	1.00	1.00
8	VFL07082015.0008.raw	Blood Alc temp VFL.MET	AQ	1.00	1.00
9	VFL07082015.0009.raw	Blood Alc temp VFL.MET	AQ	1.00	1.00
10	VFL07082015.0010.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
11	VFL07082015.0011.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
12	VFL07082015.0012.raw	simsoln.met	.10 ALB	1.00	1.00
13	VFL07082015.0013.raw	simsoln.met	.10 ALB	1.00	1.00
14	VFL07082015.0014.raw	simsoln.met	.10 ALB	1.00	1.00
15	VFL07082015.0015.raw	simsoln.met	.10 ALB	1.00	1.00
16	VFL07082015.0016.raw	simsoln.met	.10 ALB	1.00	1.00
17	VFL07082015.0017.raw	simsoln.met	.10 ALB	1.00	1.00
18	VFL07082015.0018.raw	simsoln.met	.10 ALB	1.00	1.00
19	VFL07082015.0019.raw	simsoln.met	.10 DJP	1.00	1.00
20	VFL07082015.0020.raw	simsoln.met	.10 DJP	1.00	1.00
21	VFL07082015.0021.raw	simsoln.met	.10 DJP	1.00	1.00
22	VFL07082015.0022.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
23	VFL07082015.0023.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
24	VFL07082015.0024.raw	simsoln.met	.10 DJP	1.00	1.00
25	VFL07082015.0025.raw	simsoln.met	.10 DJP	1.00	1.00
26	VFL07082015.0026.raw	simsoln.met	.10 DJP	1.00	1.00
27	VFL07082015.0027.raw	simsoln.met	.10 DJP	1.00	1.00
28	VFL07082015.0028.raw	simsoln.met	.02 ALB	1.00	1.00
29	VFL07082015.0029.raw	simsoln.met	.02 ALB	1.00	1.00
30	VFL07082015.0030.raw	simsoln.met	.02 ALB	1.00	1.00
31	VFL07082015.0031.raw	simsoln.met	.02 ALB	1.00	1.00
32	VFL07082015.0032.raw	simsoln.met	.02 ALB	1.00	1.00
33	VFL07082015.0033.raw	simsoln.met	.02 ALB	1.00	1.00
34	VFL07082015.0034.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
35	VFL07082015.0035.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
36	VFL07082015.0036.raw	simsoln.met	.02 ALB	1.00	1.00
37	VFL07082015.0037.raw	simsoln.met	.02 DJP	1.00	1.00
38	VFL07082015.0038.raw	simsoln.met	.02 DJP	1.00	1.00
39	VFL07082015.0039.raw	simsoln.met	.02 DJP	1.00	1.00
40	VFL07082015.0040.raw	simsoln.met	.02 DJP	1.00	1.00
41	VFL07082015.0041.raw	simsoln.met	.02 DJP	1.00	1.00
42	VFL07082015.0042.raw	simsoln.met	.02 DJP	1.00	1.00
43	VFL07082015.0043.raw	simsoln.met	.02 DJP	1.00	1.00
44	VFL07082015.0044.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
45	VFL07082015.0045.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
46	VFL07082015.0046.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
47	VFL07082015.0047.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
48	VFL07082015.0048.raw	Blood Alc temp VFL.MET	WB	1.00	1.00
49	VFL07082015.0049.raw	Blood Alc temp VFL.MET	WB	1.00	1.00
50	VFL07082015.0050.raw	Blood Alc temp VFL.MET	V15-1082 A1-1	1.00	1.00
51	VFL07082015.0051.raw	Blood Alc temp VFL.MET	V15-1082 A1-1	1.00	1.00
52	VFL07082015.0052.raw	Blood Alc temp VFL.MET	V15-1083 A1-2	1.00	1.00
53	VFL07082015.0053.raw	Blood Alc temp VFL.MET	V15-1083 A1-2	1.00	1.00
54	VFL07082015.0054.raw	Blood Alc temp VFL.MET	V15-1084 A1-1	1.00	1.00
55	VFL07082015.0055.raw	Blood Alc temp VFL.MET	V15-1084 A1-1	1.00	1.00
56	VFL07082015.0056.raw	Blood Alc temp VFL.MET	V15-1086 A1-1	1.00	1.00
57	VFL07082015.0057.raw	Blood Alc temp VFL.MET	V15-1086 A1-1	1.00	1.00
58	VFL07082015.0058.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
59	VFL07082015.0059.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
60	VFL07082015.0060.raw	Blood Alc temp VFL.MET	V15-1093 A1-1	1.00	1.00
61	VFL07082015.0061.raw	Blood Alc temp VFL.MET	V15-1093 A1-1	1.00	1.00
62	VFL07082015.0062.raw	simsoln.met	.40 DJP	1.00	1.00

OTHER SAMPLES NOT INCLUDED 7/10/15 DB

OTHER SAMPLES NOT INCLUDED 7/10/15

Samples run w/in 24 hrs of cal AB 7/10/15

15-11-020
P. 46

7/10/15 AB

DB

Entry #	Raw File Name	Method File Name	Sample Name	Sample Wt.	Int. Std. Amount
63	VFL07082015.0063.raw	simsoln.met	.40 DJP	1.00	1.00
64	VFL07082015.0064.raw	simsoln.met	.40 DJP	1.00	1.00
65	VFL07082015.0065.raw	simsoln.met	.40 DJP	1.00	1.00
66	VFL07082015.0066.raw	simsoln.met	.40 DJP	1.00	1.00
67	VFL07082015.0067.raw	simsoln.met	.40 DJP	1.00	1.00
68	VFL07082015.0068.raw	simsoln.met	.40 DJP	1.00	1.00
69	VFL07082015.0069.raw	simsoln.met	.40 ALB	1.00	1.00
70	VFL07082015.0070.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
71	VFL07082015.0071.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
72	VFL07082015.0072.raw	simsoln.met	.40 ALB	1.00	1.00
73	VFL07082015.0073.raw	simsoln.met	.40 ALB	1.00	1.00
74	VFL07082015.0074.raw	simsoln.met	.40 ALB	1.00	1.00
75	VFL07082015.0075.raw	simsoln.met	.40 ALB	1.00	1.00
76	VFL07082015.0076.raw	simsoln.met	.40 ALB	1.00	1.00
77	VFL07082015.0077.raw	simsoln.met	.40 ALB	1.00	1.00
78	VFL07082015.0078.raw	Blood Alc temp VFL.MET	AQ 0.08 VER	1.00	1.00
79	VFL07082015.0079.raw	Blood Alc temp VFL.MET	AQ 0.08 VER	1.00	1.00
80	VFL07082015.0080.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
81	VFL07082015.0081.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00

OTHER SAMPLES NOT INCLUDED. 8/7/15

Samples run w/ in 24 hrs of calibration. Run is defined as prepared and added to the sequence and autosampler.

AB 7/10/15

15-11020

7/10/15 AB p. 47

File Name: C:\Methods\VFL07082015.CAL
Version: 7

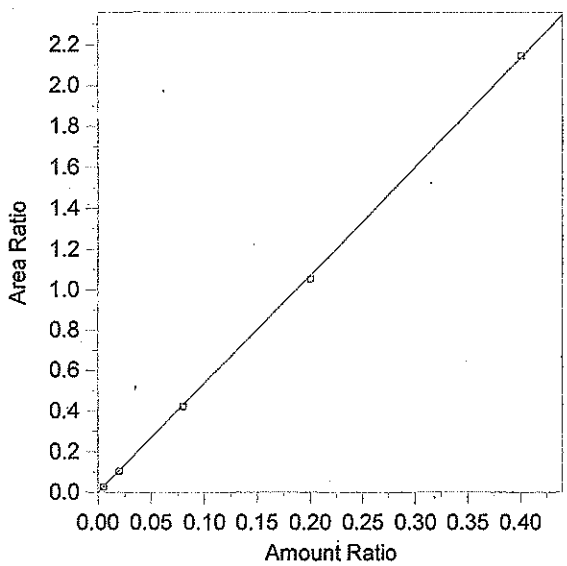
Creator:
Description:
Reason for change:

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:	2.654 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 = 5.333998 X + 0

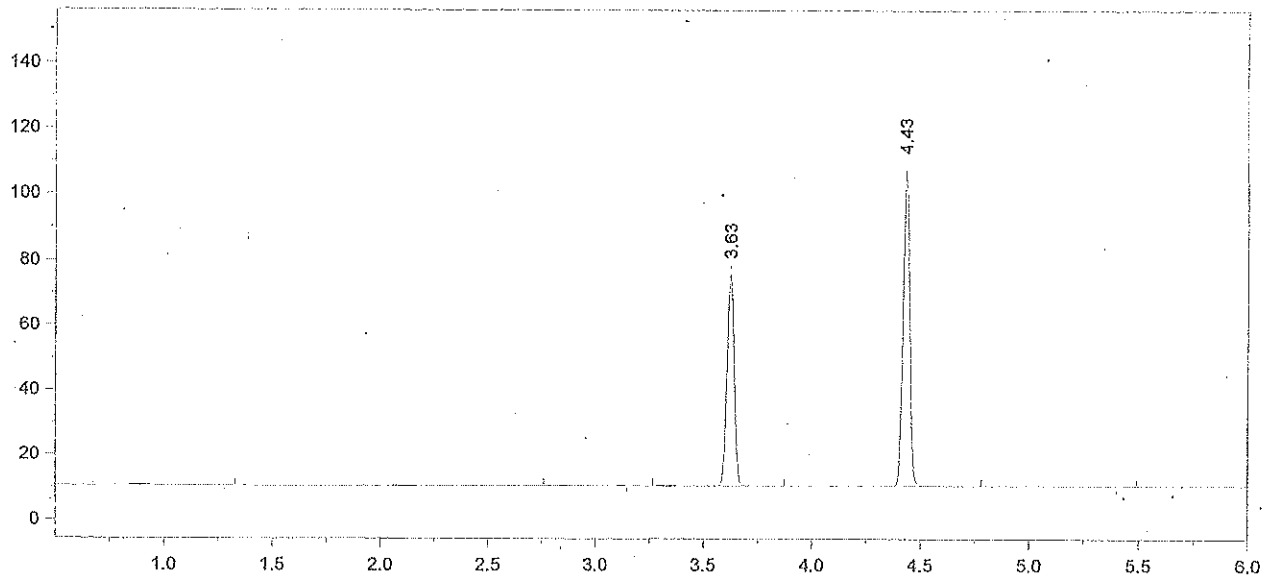
Linear fit with equal weighting, forced to origin

Coefficient of determination:	0.9998475
Average error:	2.360%
Average CF:	5.292365
RSD:	2.964%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source	Date and time
1	(0.0836)	(85146)	--	--	0.0836	85146	Manual	8/13/2014 9:33:12 AM
2	0.005	5727.489	1145498	3.471	0.005	2.759559E-02	C:\Alcohol Data\VFL07082015\VFL07082015.0003.BND	7/8/2015 2:38:22 PM
3	0.02	18640.78	932039	-4.400	0.02	0.101986	C:\Alcohol Data\VFL07082015\VFL07082015.0004.BND	7/8/2015 2:55:39 PM
4	0.08	84075.09	1050939	-1.884	0.08	0.4186796	C:\Alcohol Data\VFL07082015\VFL07082015.0005.BND	7/8/2015 3:10:25 PM
5	0.2	200539.7	1002699	-1.566	0.2	1.050091	C:\Alcohol Data\VFL07082015\VFL07082015.0006.BND	7/8/2015 3:26:58 PM
6	0.4	378471.9	946179.8	0.477	0.4	2.143785	C:\Alcohol Data\VFL07082015\VFL07082015.0007.BND	7/8/2015 3:42:00 PM

15-11-020

7/10/15 C.48



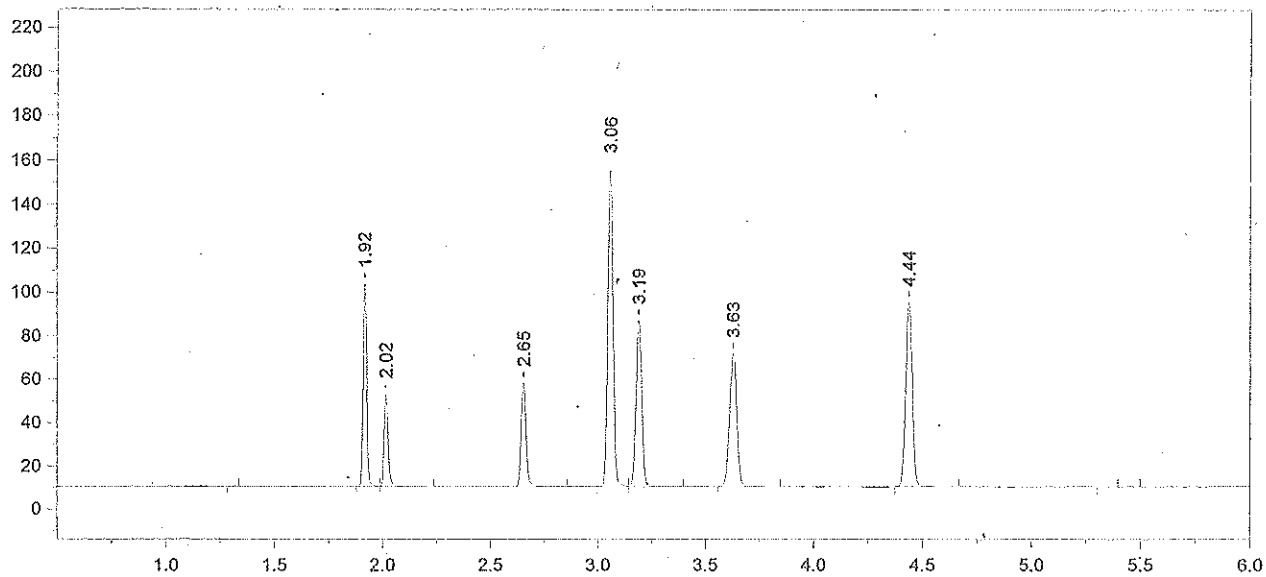
Format File Name = AlcoholVFL.FMT

Today's Date = 7/9/2015
Today's Time = 7:43:42 AM
Bound File Name = VFL07082015.0001.RAW
Sample Name = BLANK
Date Taken = 7/8/2015 2:07:44 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
4	3.63	t-Butanol	151275	0.9604
5	4.43	n-Propanol	206672	1.0000

15-11-020

7/10/15 AS 0.49 AS



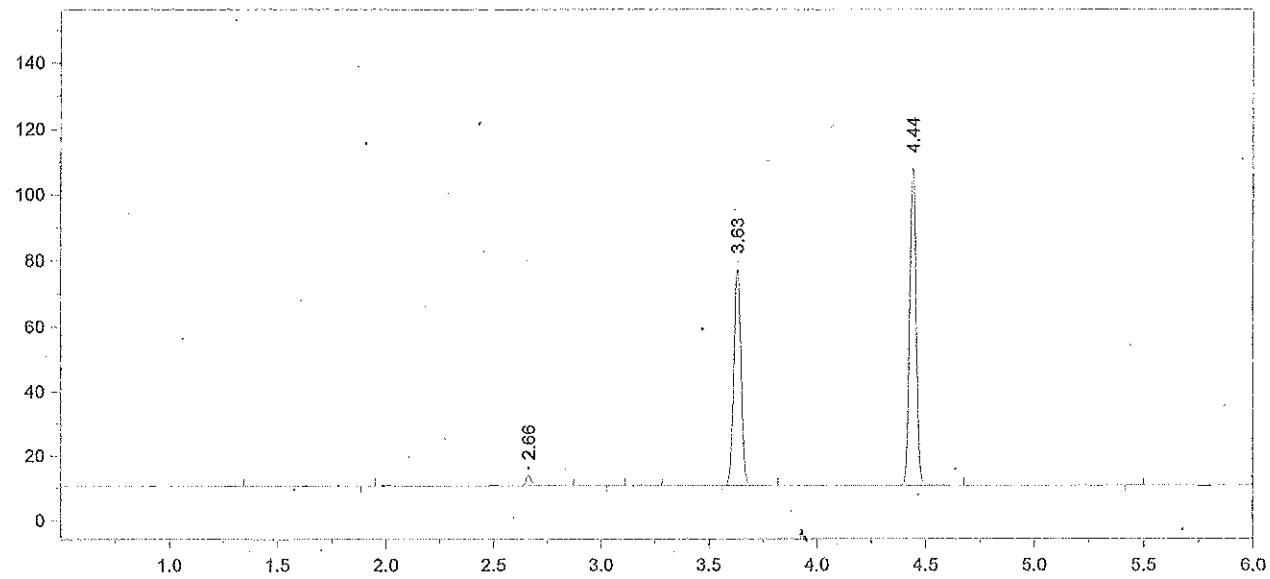
Format File Name = AlcoholVFL.FMT

Today's Date = 7/9/2015
Today's Time = 7:43:48 AM
Bound File Name = VFL07082015.0002.RAW
Sample Name = TMX
Date Taken = 7/8/2015 2:24:02 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	1.92	Acetaldehyde	110440	0.0695
3	2.02	Methanol	54482	0.1232
4	2.65	Ethanol	75340	0.0784
5	3.06	Acetone	249991	0.0657
6	3.19	Isopropanol	144461	0.0848
7	3.63	t-Butanol	142162	1.0359
8	4.44	n-Propanol	180073	1.0000

15-11-020

7/10/15 AB 0.50



Format File Name = AlcoholVFL.FMT

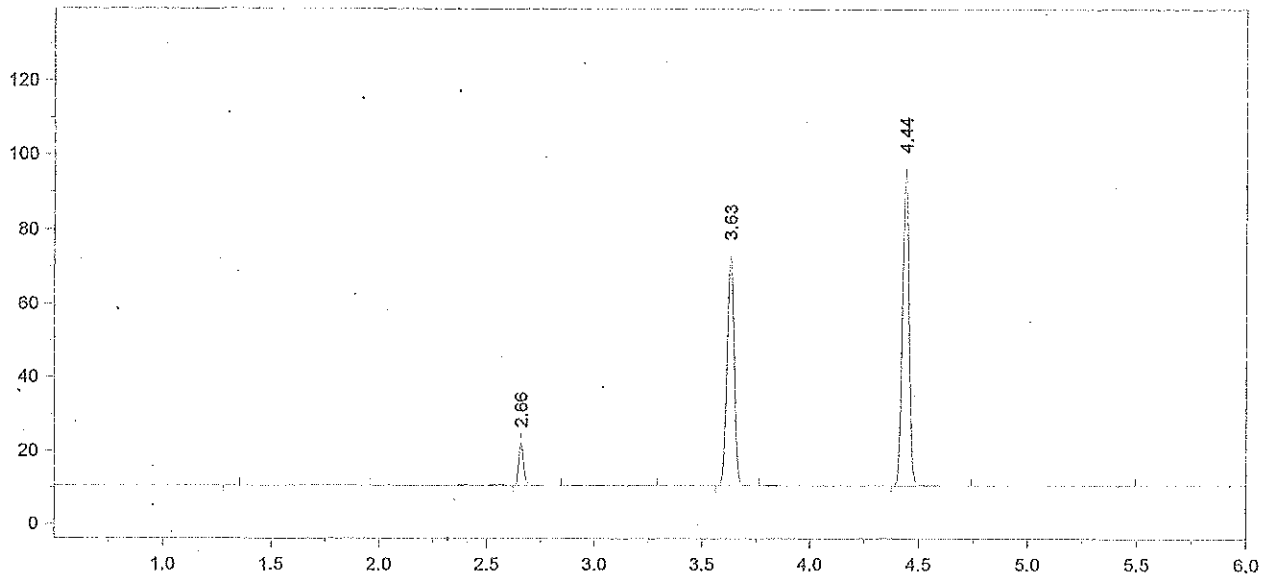
Today's Date = 7/9/2015
Today's Time = 7:43:54 AM
Bound File Name = VFL07082015.0003.RAW
Sample Name = STD A
Date Taken = 7/8/2015 2:38:13 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount %.WT/VOL
3	2.66	Ethanol	05727	0.0052
6	3.63	t-Butanol	154549	0.9770
7	4.44	n-Propanol	207551	1.0000

15-11-020

7/10/15
AB

0.51



Format File Name = AlcoholVFL.FMT

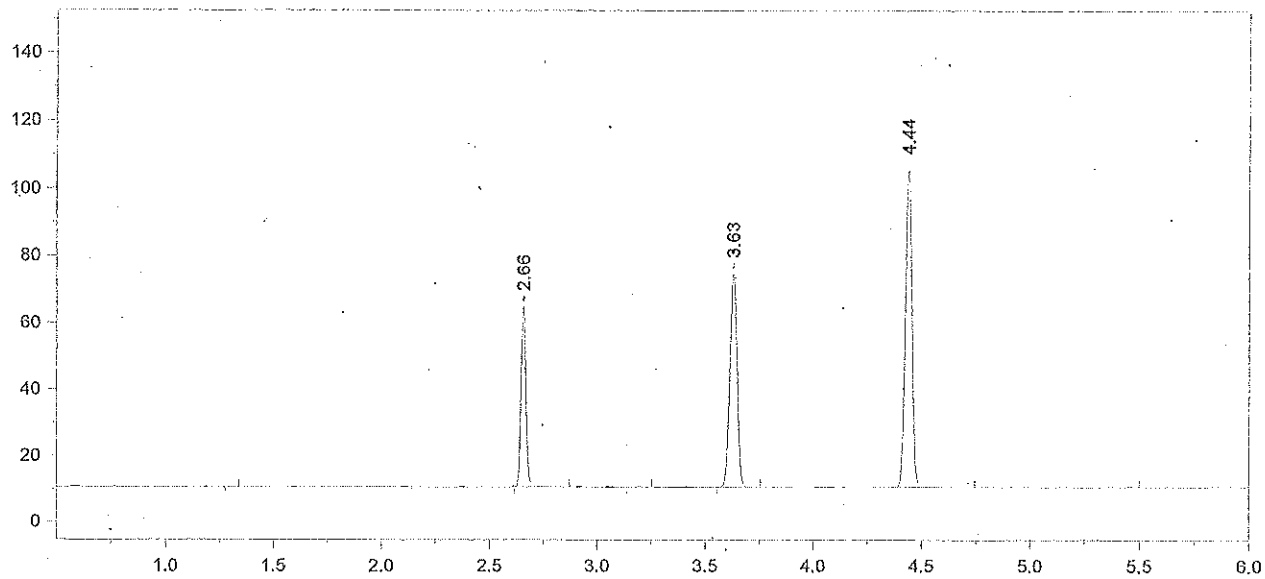
Today's Date = 7/9/2015
Today's Time = 7:43:59 AM
Bound File Name = VFL07082015.0004.RAW
Sample Name = STD B
Date Taken = 7/8/2015 2:55:29 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	18641	0.0191
4	3.63	t-Butanol	144600	1.0381
5	4.44	n-Propanol	182778	1.0000

15-11-020

7/10/15 AS

e.52 AR



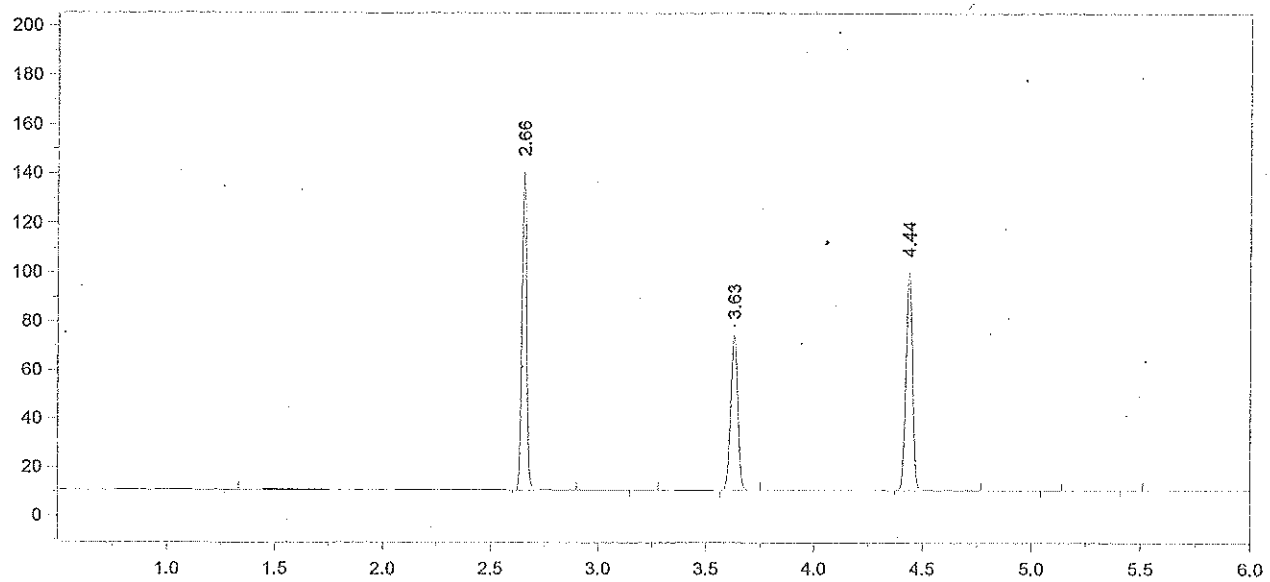
Format File Name = AlcoholVFL.FMT

Today's Date = 7/9/2015
Today's Time = 7:44:05 AM
Bound File Name = VFL07082015.0005.RAW
Sample Name = STD C
Date Taken = 7/8/2015 3:10:20 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	84075	0.0785
4	3.63	t-Butanol	148320	0.9691
5	4.44	n-Propanol	200810	1.0000

15-11-020

7/10/15 AB 0.53 Dr



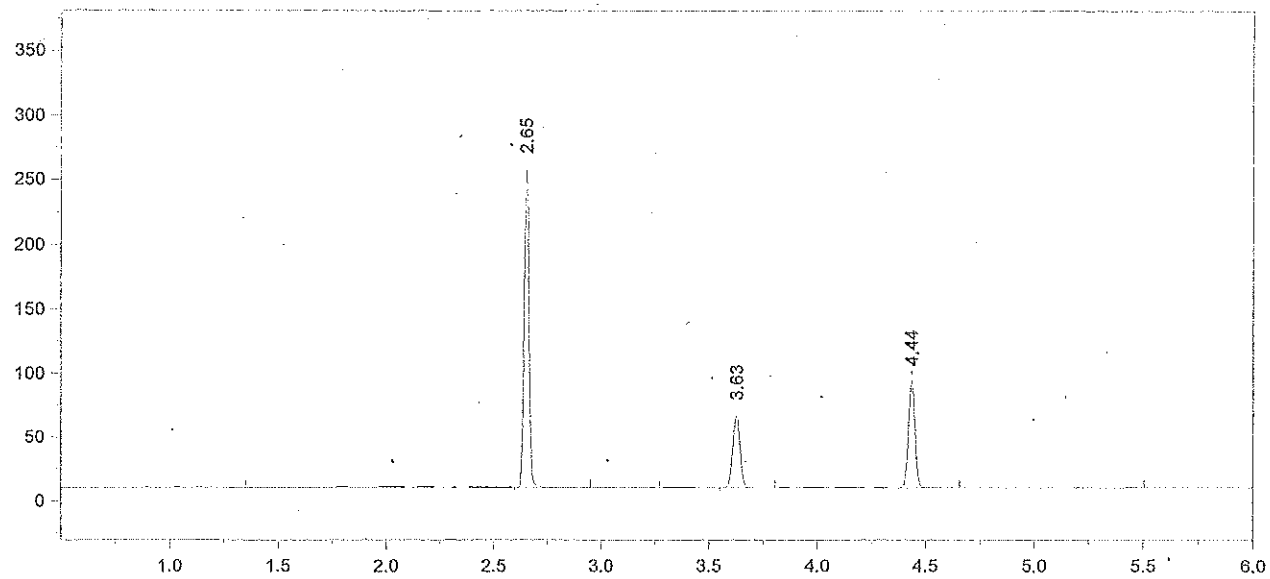
Format File Name = AlcoholVFL.FMT

Today's Date = 7/9/2015
Today's Time = 7:44:12 AM
Bound File Name = VFL07082015.0006.RAW
Sample Name = STD D
Date Taken = 7/8/2015 3:26:53 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	200540	0.1969
4	3.63	t-Butanol	147159	1.0111
5	4.44	n-Propanol	190974	1.0000

15-11-020

7/10/15 AB 0.54 QC



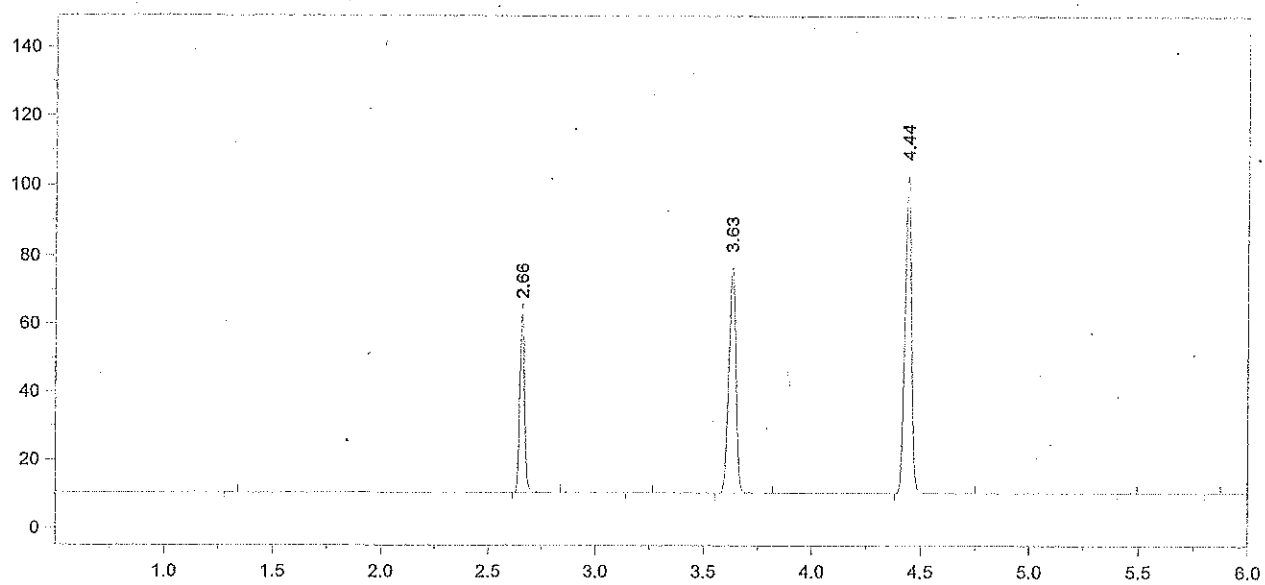
Format File Name = AlcoholVFL.FMT

Today's Date = 7/9/2015
Today's Time = 7:44:18 AM
Bound File Name = VFL07082015.0007.RAW
Sample Name = STD E
Date Taken = 7/8/2015 3:41:49 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	378472	0.4019
4	3.63	t-Butanol	130348	0.9688
5	4.44	n-Propanol	176544	1.0000

15-11-020

7/10/15 AB
a 50 Dr



Format File Name = AlcoholVFL.FMT

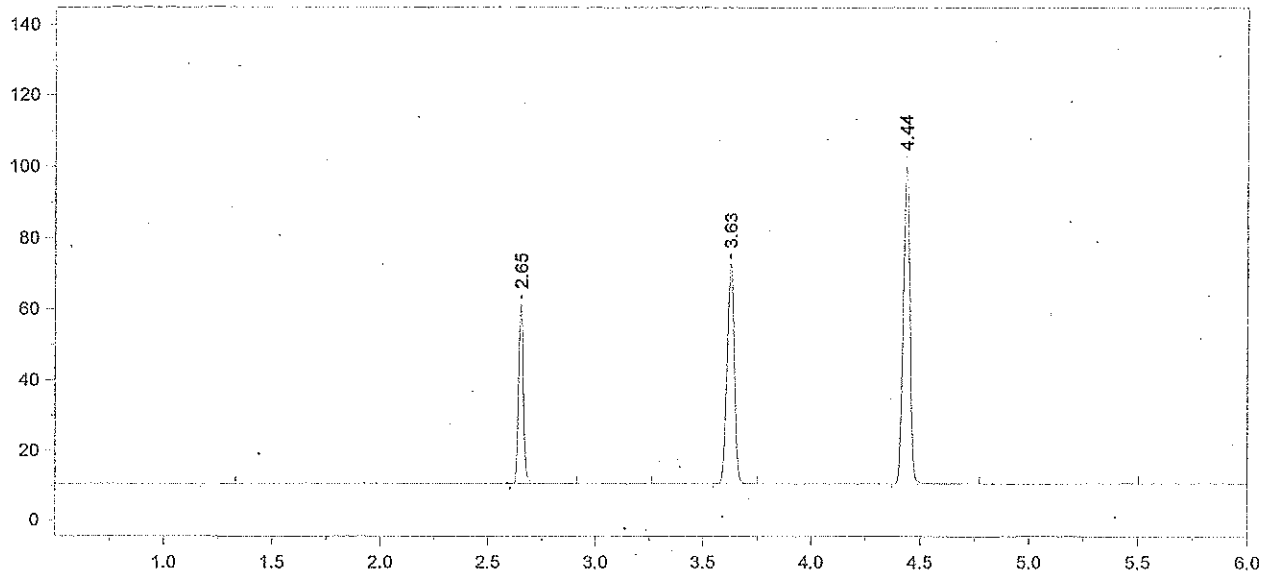
Today's Date = 7/8/2015
Today's Time = 3:58:22 PM
Bound File Name = VFL07082015.0008.RAW
Sample Name = AQ
Date Taken = 7/8/2015 3:58:18 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	80949	0.0774
4	3.63	t-Butanol	153310	1.0255
5	4.44	n-Propanol	196153	1.0000

15-11 020

7/10/15 AB

p.56 Q



Format File Name = AlcoholVFL.FMT

Today's Date = 7/8/2015
Today's Time = 4:11:46 PM
Bound File Name = VFL07082015.0009.RAW
Sample Name = AQ
Date Taken = 7/8/2015 4:11:37 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	79172	0.0777
4	3.63	t-Butanol	143761	0.9879
5	4.44	n-Propanol	190937	1.0000

AQ MEAN: 0.0775 % ETHANOL

±5% 0.0736 – 0.0814

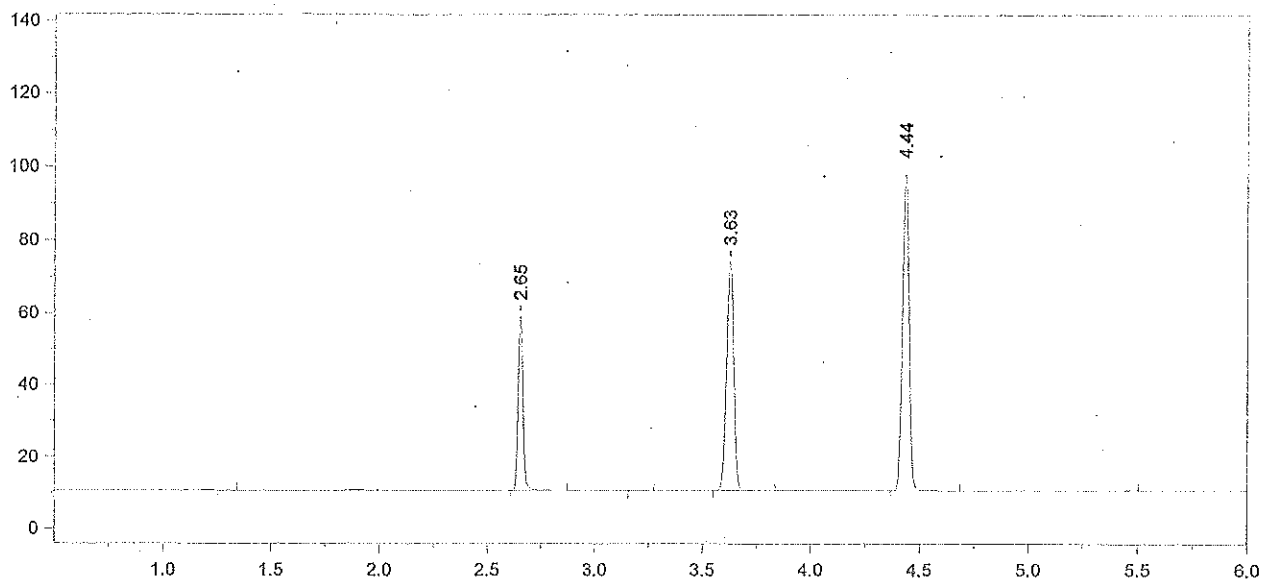
RECOVERY: $\frac{0.077}{0.08}$ = 96.2%.

DJ 7/9/15

15-11-020

7/10/15 AB

P.57 DJ



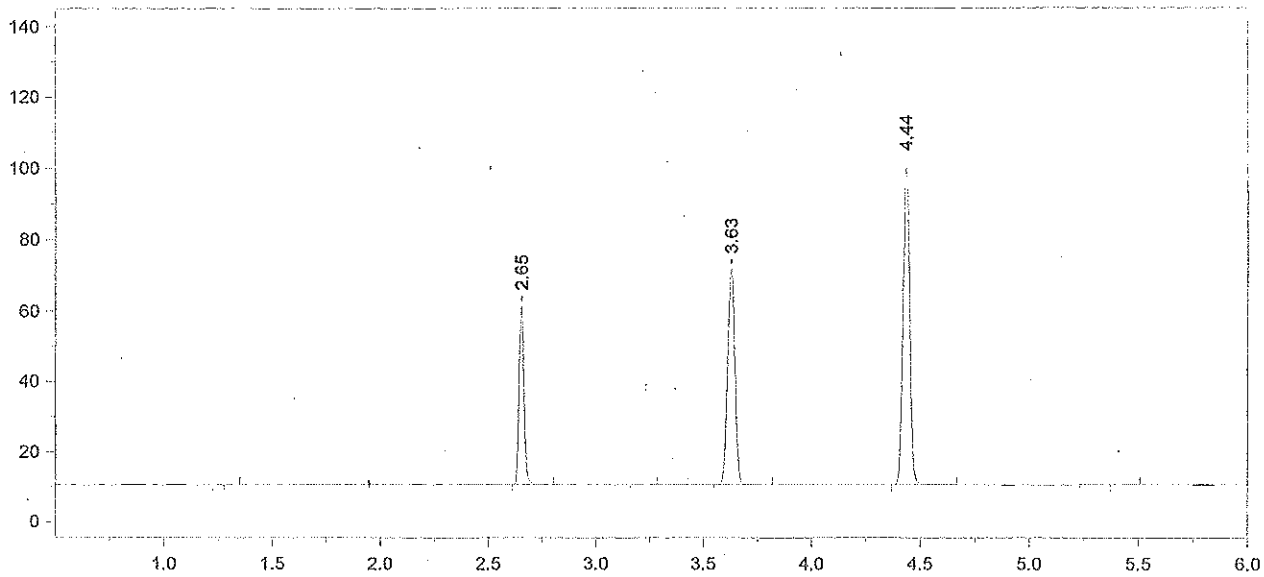
Format File Name = AlcoholVFL.FMT

Today's Date = 7/8/2015
Today's Time = 4:29:47 PM
Bound File Name = VFL07082015.0010.RAW
Sample Name = CCS
Date Taken = 7/8/2015 4:29:43 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	75618	0.0762
4	3.63	t-Butanol	147263	1.0385
5	4.44	n-Propanol	186066	1.0000

15-11-020

7/10/15 AS 0.58



Format File Name = AlcoholVFL.FMT

Today's Date = 7/8/2015
Today's Time = 4:43:05 PM
Bound File Name = VFL07082015.0011.RAW
Sample Name = CCS
Date Taken = 7/8/2015 4:43:01 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	78321	0.0771
4	3.63	t-Butanol	142166	0.9792
5	4.44	n-Propanol	190499	1.0000

CCS MEAN: 0.0766% ETHANOL

±5%: 0.0728 - 0.0804

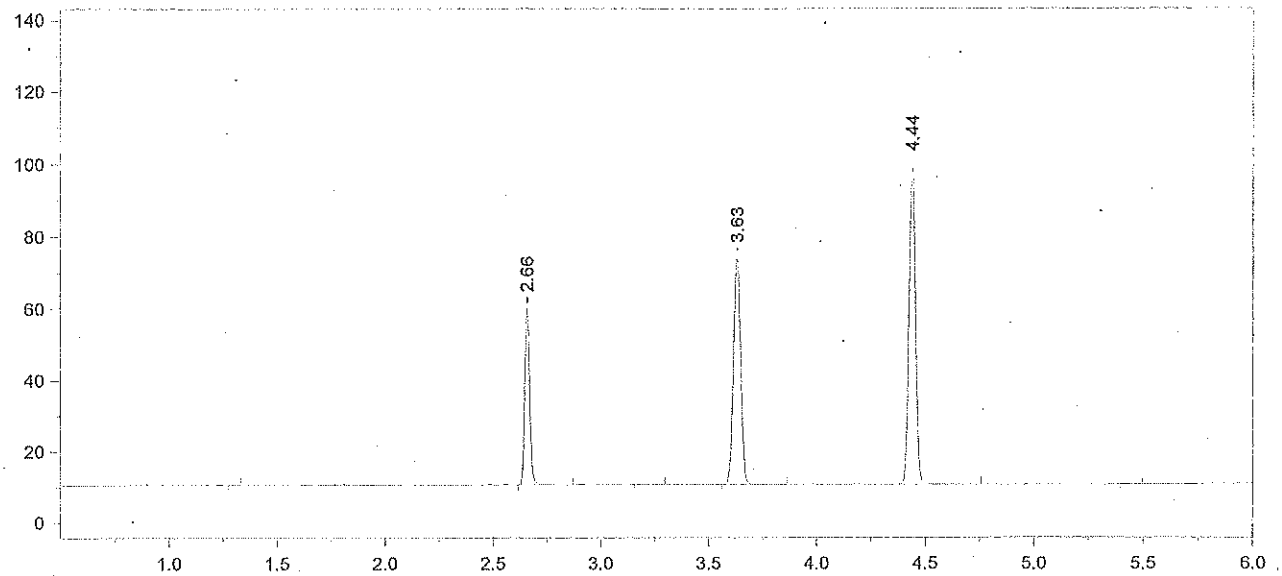
RECOVERY: $\frac{0.076}{0.08}$ = 95%

DG 7/21/15

15-11-020

7/10/15 AB

P. 59



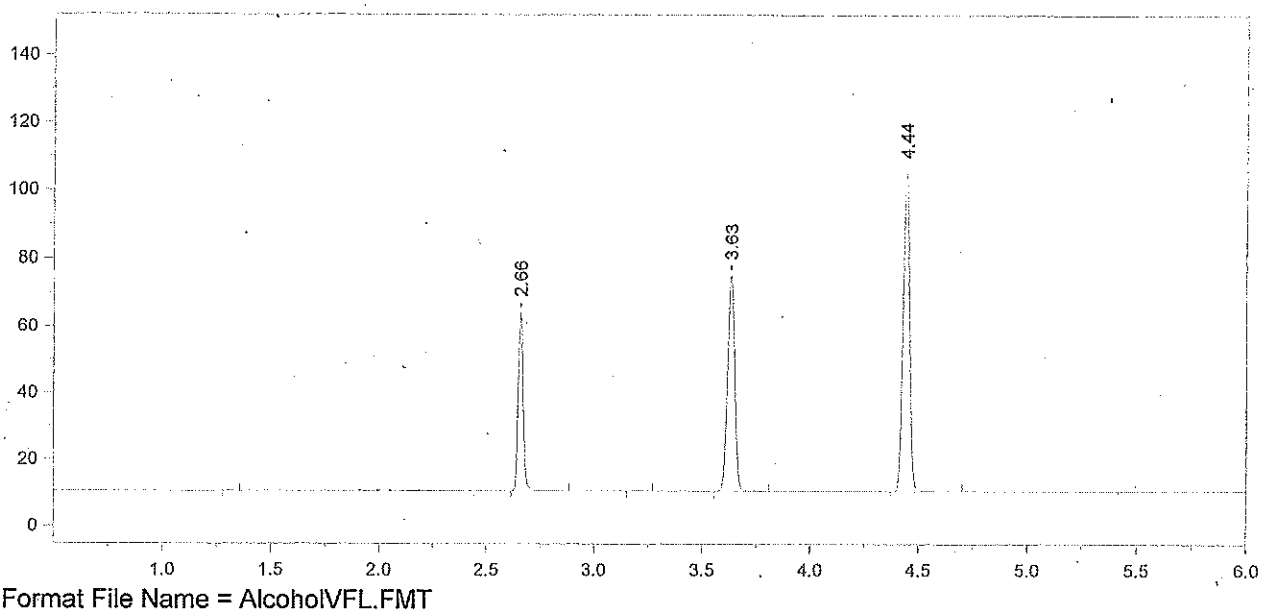
Format File Name = AlcoholVFL.FMT

Today's Date = 7/8/2015
Today's Time = 7:36:48 PM
Bound File Name = VFL07082015.0022.RAW
Sample Name = CCS
Date Taken = 7/8/2015 7:36:43 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	76851	0.0766
4	3.63	t-Butanol	146350	1.0205
5	4.44	n-Propanol	188177	1.0000

15-11-020

7/10/15
0.60



Format File Name = AlcoholVFL.FMT

Today's Date = 7/8/2015
Today's Time = 7:50:11 PM
Bound File Name = VFL07082015.0023.RAW
Sample Name = CCS
Date Taken = 7/8/2015 7:50:02 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	83303	0.0776
4	3.63	t-Butanol	149179	0.9728
5	4.44	n-Propanol	201215	1.0000

CCS MEAN: 0.0771% ETHANOL

±3σ: 0.0732 – 0.0809

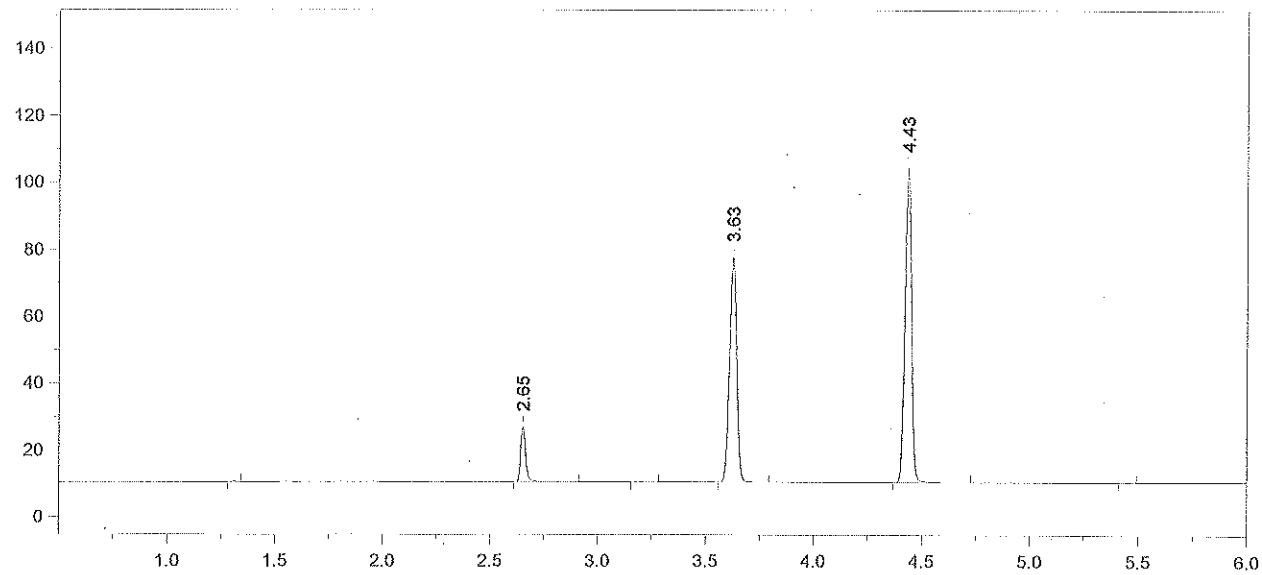
Recovery: $\frac{0.077}{0.08}$ = 96.2%

DS 7/9/15

15-11-020

7/10/15 DB

P. 61 DS



Format File Name = simsolnVFL.met.FMT

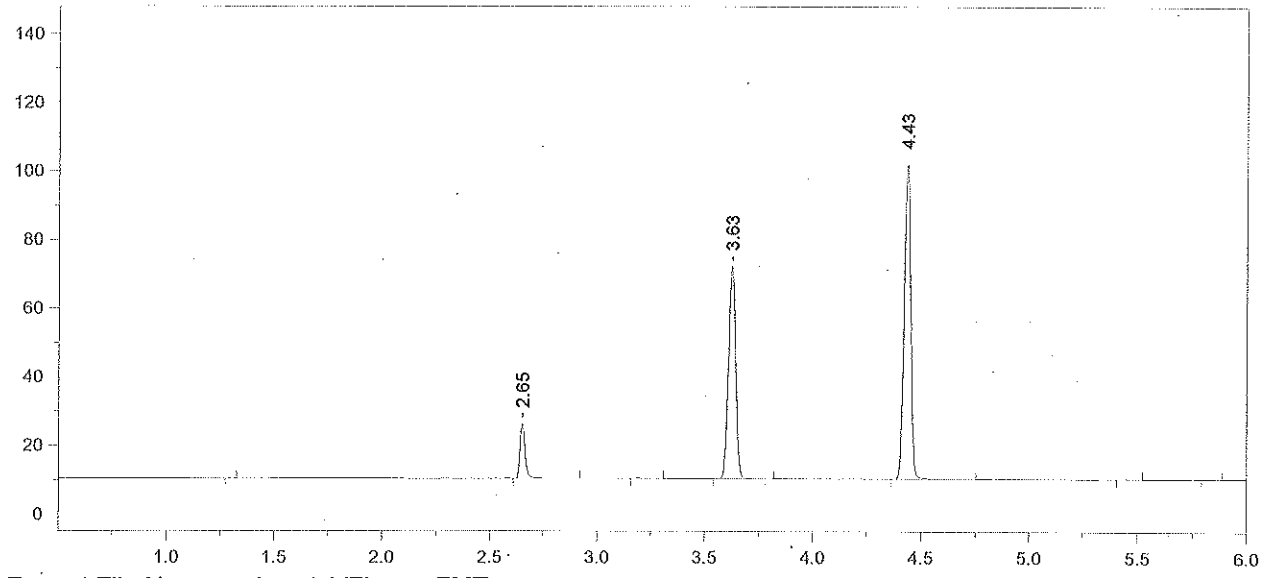
Today's Date = 7/8/2015
Today's Time = 9:11:04 PM
Bound File Name = VFL07082015.0028.RAW
Sample Name = .02 ALB
Date Taken = 7/8/2015 9:10:57 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	26330	0.0245	0.0200
4	3.63	t-Butanol	155411	1.0134	0.8271
5	4.43	n-Propanol	201230	1.0000	0.8162

1511-020

7/10/15 AB

C.62 Dr



Format File Name = simsolnVFL.met.FMT

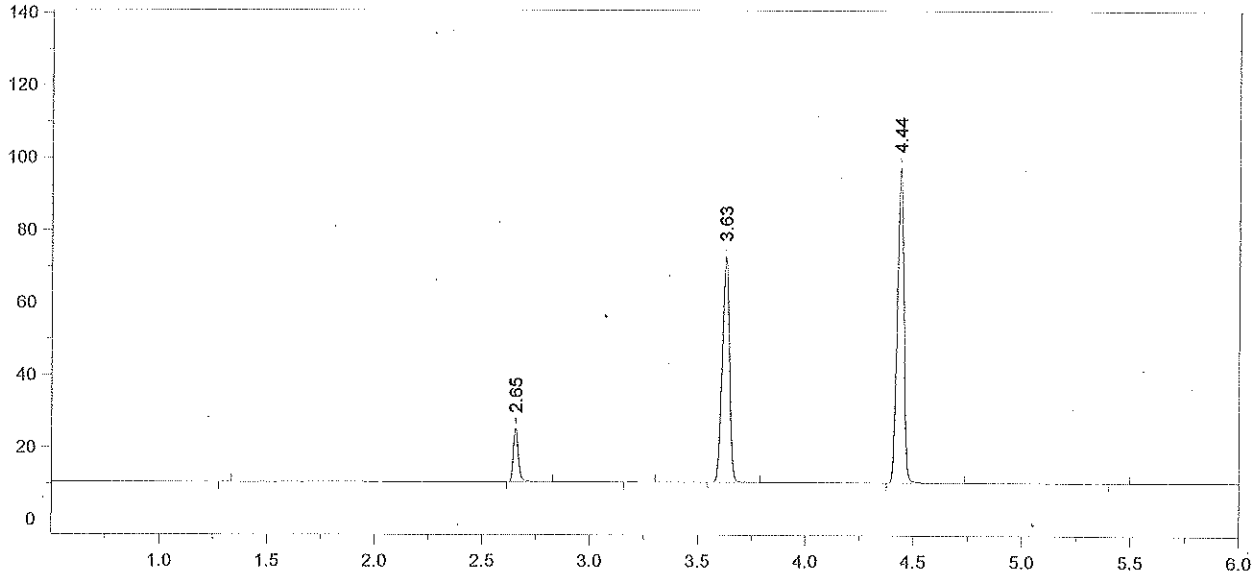
Today's Date = 7/8/2015
Today's Time = 9:25:55 PM
Bound File Name = VFL07082015.0029.RAW
Sample Name = .02 ALB
Date Taken = 7/8/2015 9:25:50 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	25755	0.0247	0.0202
4	3.63	t-Butanol	143750	0.9647	0.7874
5	4.43	n-Propanol	195512	1.0000	0.8162

15-11-020

7/10/15 AB

P.63 Q



Format File Name = simsolnVFL.met.FMT

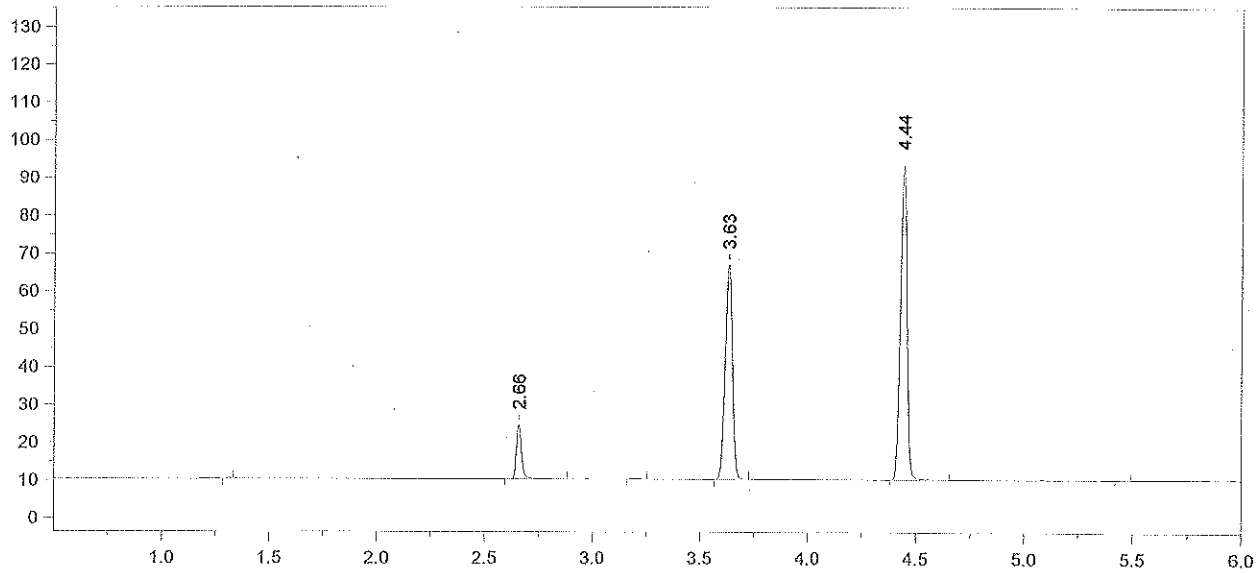
Today's Date = 7/8/2015
Today's Time = 9:42:30 PM
Bound File Name = VFL07082015.0030.RAW
Sample Name = .02 ALB
Date Taken = 7/8/2015 9:42:21 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	23830	0.0241	0.0197
4	3.63	t-Butanol	144598	1.0246	0.8363
5	4.44	n-Propanol	185179	1.0000	0.8162

15-11-020

7/10/15 AB

P-64



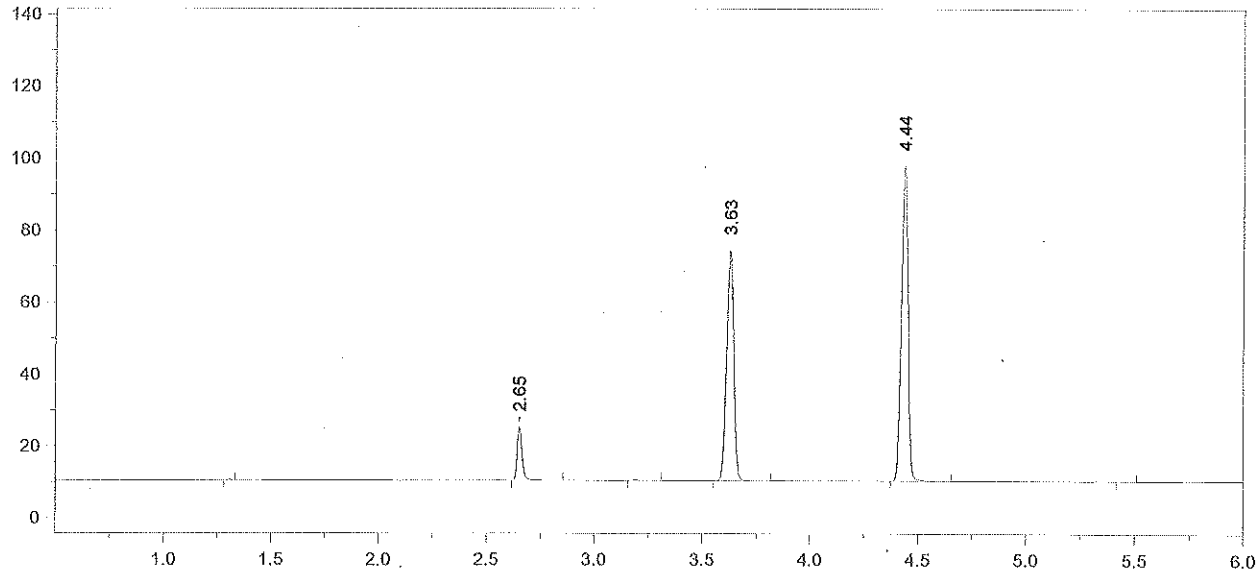
Format File Name = simsolnVFL.met.FMT

Today's Date = 7/8/2015 Today's Time = 9:55:38 PM
Bound File Name = VFL07082015.0031.RAW
Sample Name = .02 ALB
Date Taken = 7/8/2015 9:55:34 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07082015.CAL Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	23180	0.0246	0.0201
4	3.63	t-Butanol	131620	0.9775	0.7978
5	4.44	n-Propanol	176675	1.0000	0.8162

7/10/15 AB 15-1-020

P. 65



Format File Name = simsolnVFL.met.FMT

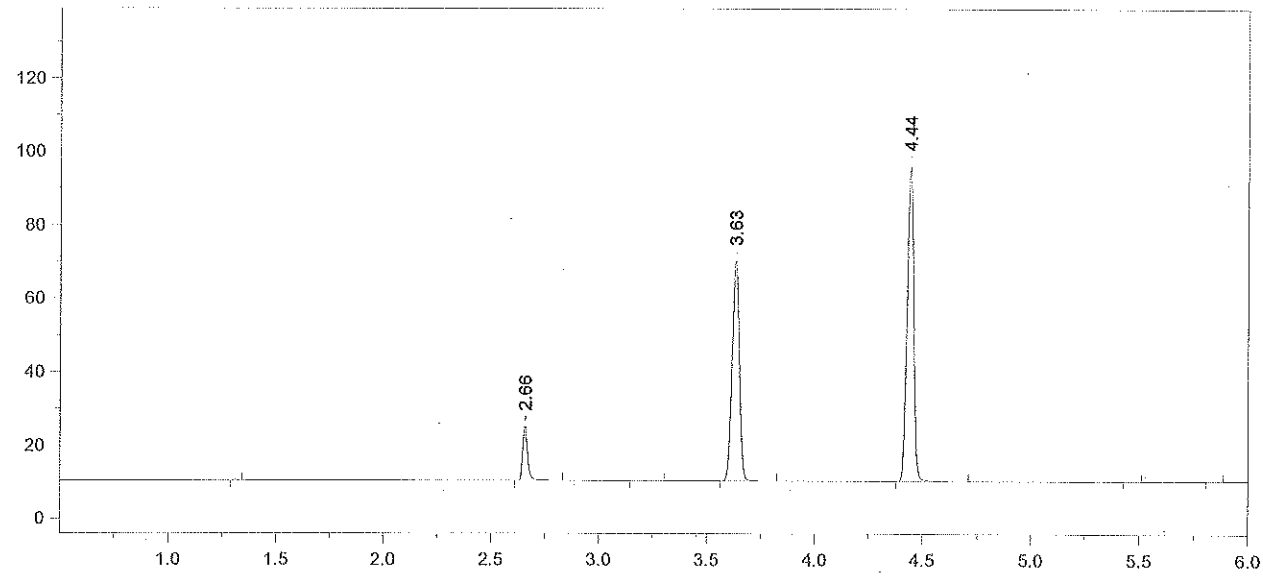
Today's Date = 7/8/2015
Today's Time = 10:13:59 PM
Bound File Name = VFL07082015.0032.RAW
Sample Name = .02 ALB
Date Taken = 7/8/2015 10:13:50 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	23787	0.0239	0.0195
4	3.63	t-Butanol	147815	1.0415	0.8501
5	4.44	n-Propanol	186226	1.0000	0.8162

15-11-020

7/10/15 AB

p. 66



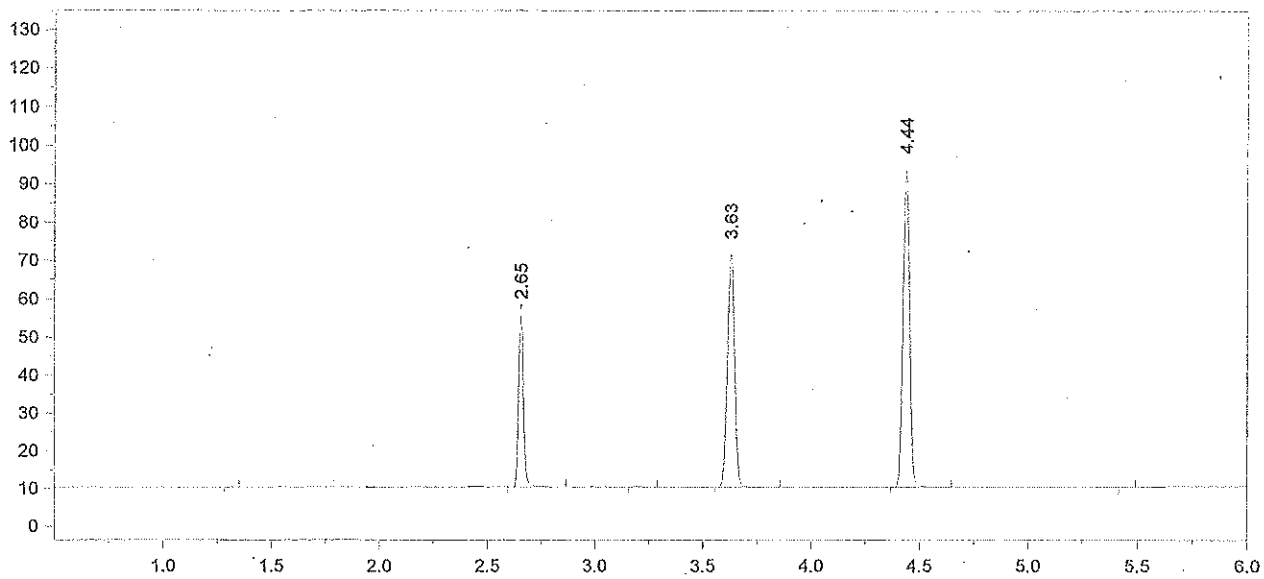
Format File Name = simsolnVFL.met.FMT

Today's Date = 7/8/2015
Today's Time = 10:27:42 PM
Bound File Name = VFL07082015.0033.RAW
Sample Name = .02 ALB
Date Taken = 7/8/2015 10:27:38 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	23748	0.0244	0.0199
4	3.63	t-Butanol	138995	0.9979	0.8145
5	4.44	n-Propanol	182760	1.0000	0.8162

7/10/15 AB

15-11-020 p.67 AB



Format File Name = AlcoholVFL.FMT

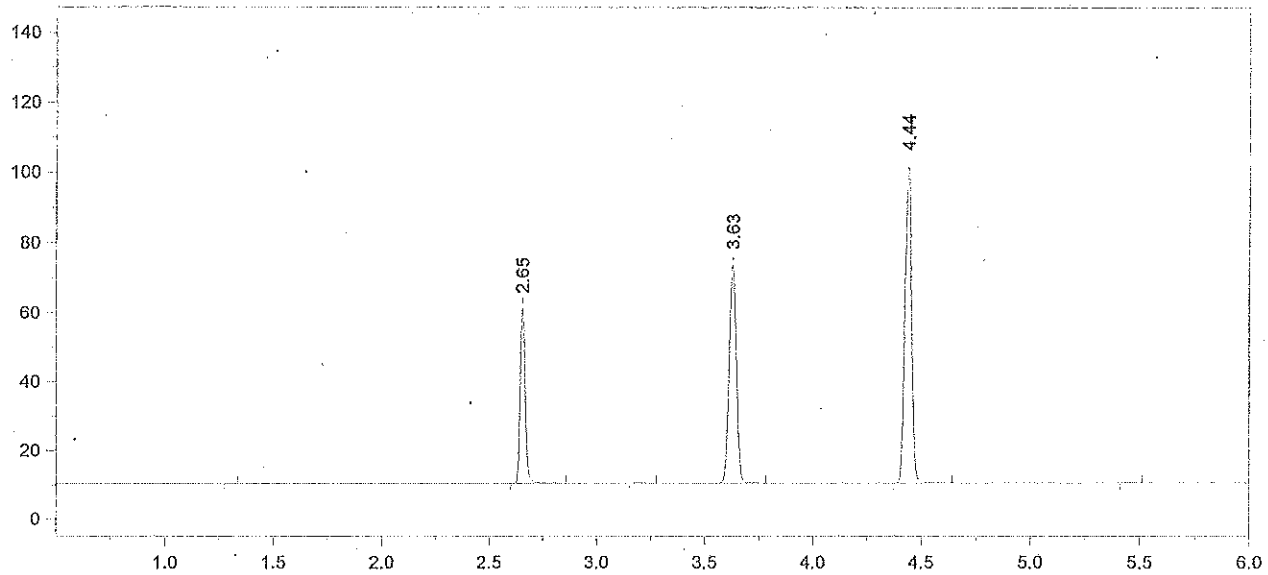
Today's Date = 7/8/2015
Today's Time = 10:45:24 PM
Bound File Name = VFL07082015.0034.RAW
Sample Name = CCS
Date Taken = 7/8/2015 10:45:20 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	70895	0.0750
4	3.63	t-Butanol	141128	1.0446
5	4.44	n-Propanol	177264	1.0000

7/10/15 DB

15-11-020

P.68



Format File Name = AlcoholVFL.FMT

Today's Date = 7/8/2015
Today's Time = 10:58:37 PM
Bound File Name = VFL07082015.0035.RAW
Sample Name = CCS
Date Taken = 7/8/2015 10:58:32 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

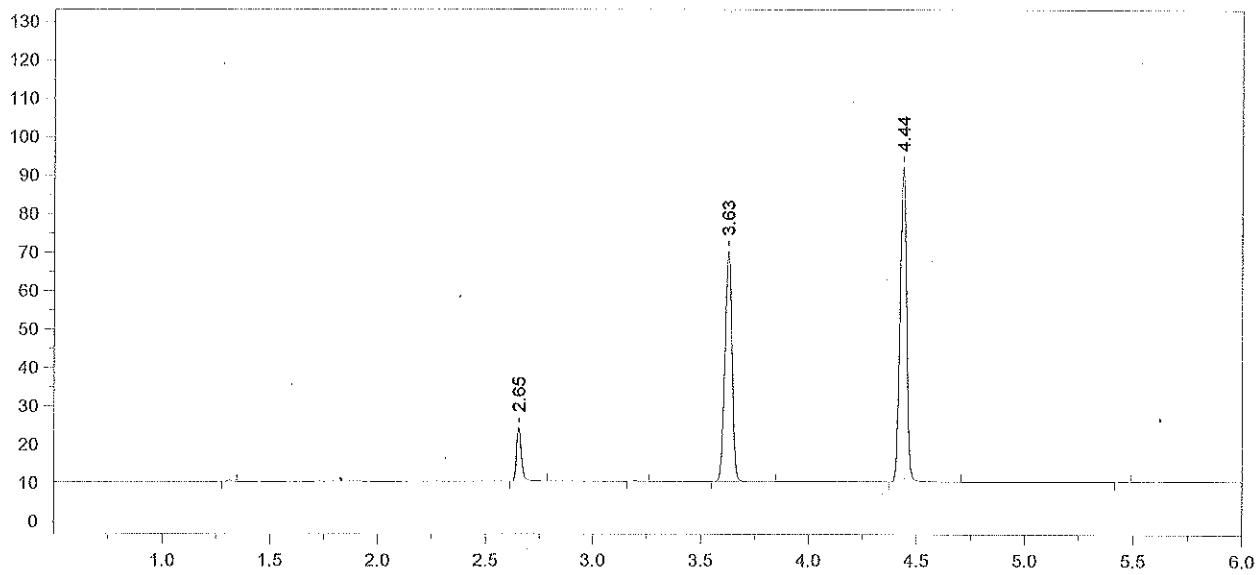
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	79261	0.0765
4	3.63	t-Butanol	145550	0.9835
5	4.44	n-Propanol	194179	1.0000

CCS MEAN: 0.0757 % ETHANOL
±5% : 0.0719 – 0.0795
RECOVERY: $\frac{0.076}{0.08}$ = 95%

7/9/15

15-11-020

7/10/15
0.69



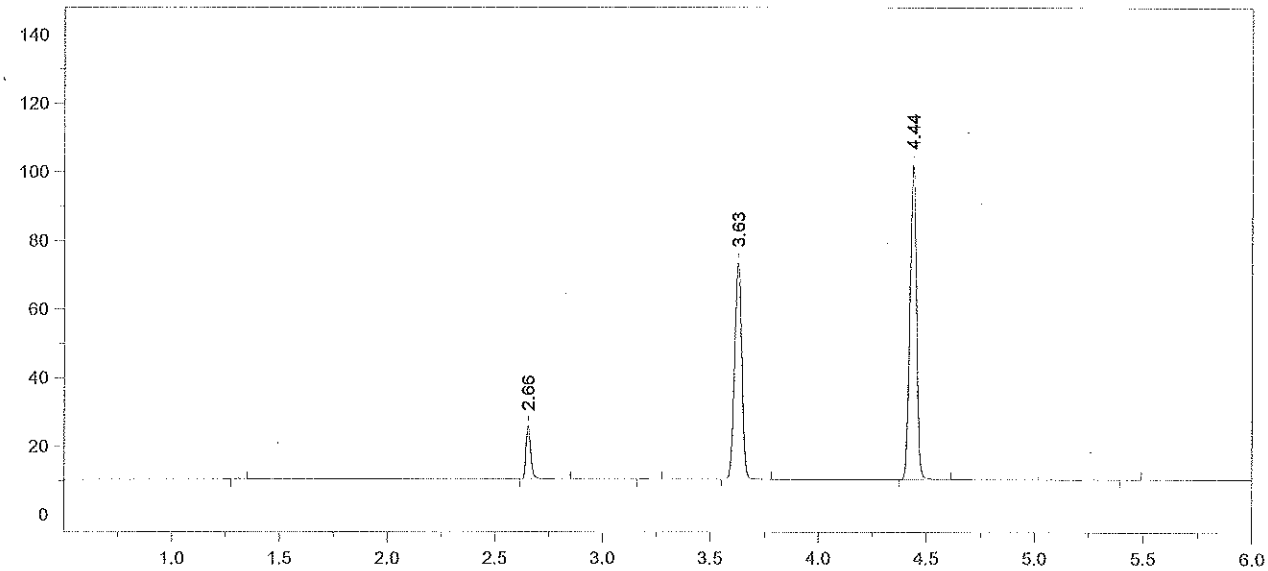
Format File Name = simsolnVFL.met.FMT

Today's Date = 7/8/2015 Today's Time = 11:16:54 PM
Bound File Name = VFL07082015.0036.RAW
Sample Name = .02 ALB
Date Taken = 7/8/2015 11:16:47 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07082015.CAL Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	22200	0.0239	0.0195
4	3.63	t-Butanol	138993	1.0464	0.8541
5	4.44	n-Propanol	174292	1.0000	0.8162

7/10/15 15-11-020

e.70

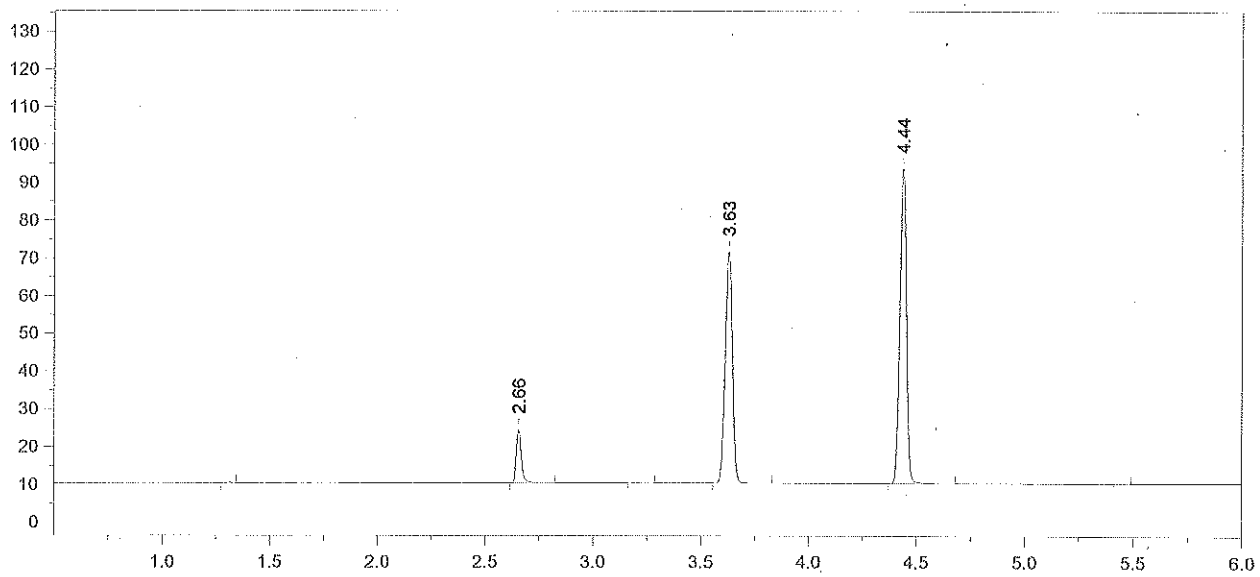


Format File Name = simsolnVFL.met.FMT

Today's Date = 7/8/2015
Today's Time = 11:30:10 PM
Bound File Name = VFL07082015.0037.RAW
Sample Name = .02 DJP
Date Taken = 7/8/2015 11:30:04 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	24949	0.0241	0.0197
4	3.63	t-Butanol	146360	0.9899	0.8080
5	4.44	n-Propanol	194001	1.0000	0.8162

7/10/15 15-11-020
AB
0.71



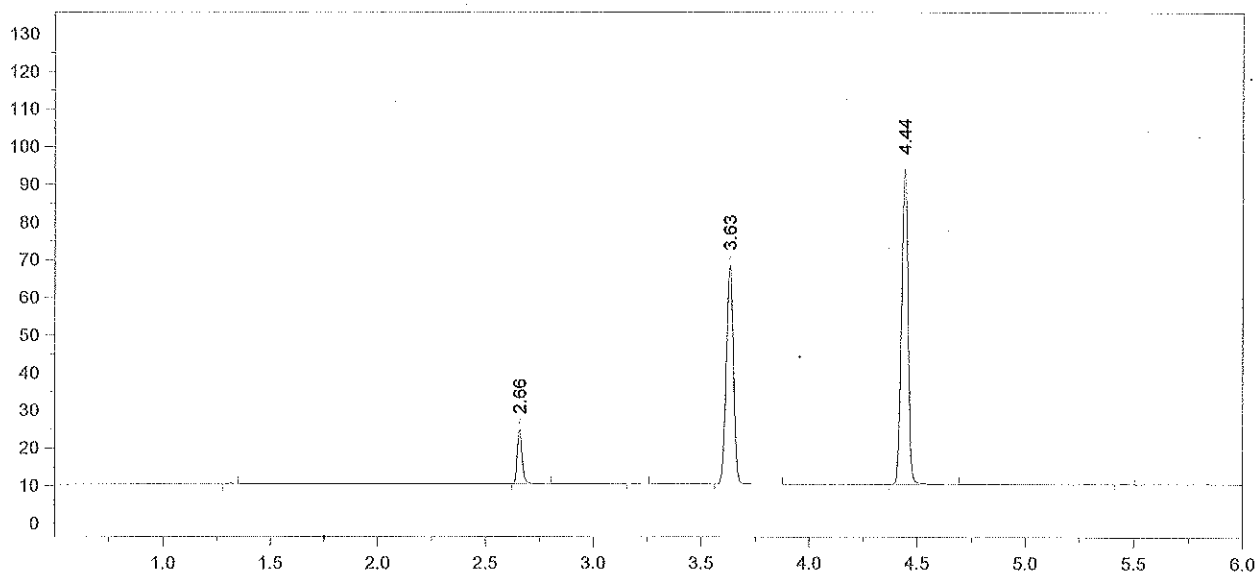
Format File Name = simsolnVFL.met.FMT

Today's Date = 7/8/2015
Today's Time = 11:48:17 PM
Bound File Name = VFL07082015.0038.RAW
Sample Name = .02 DJP
Date Taken = 7/8/2015 11:48:10 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	22615	0.0238	0.0194
4	3.63	t-Butanol	141836	1.0442	0.8523
5	4.44	n-Propanol	178234	1.0000	0.8162

7/10/15 15-11-020

p.72



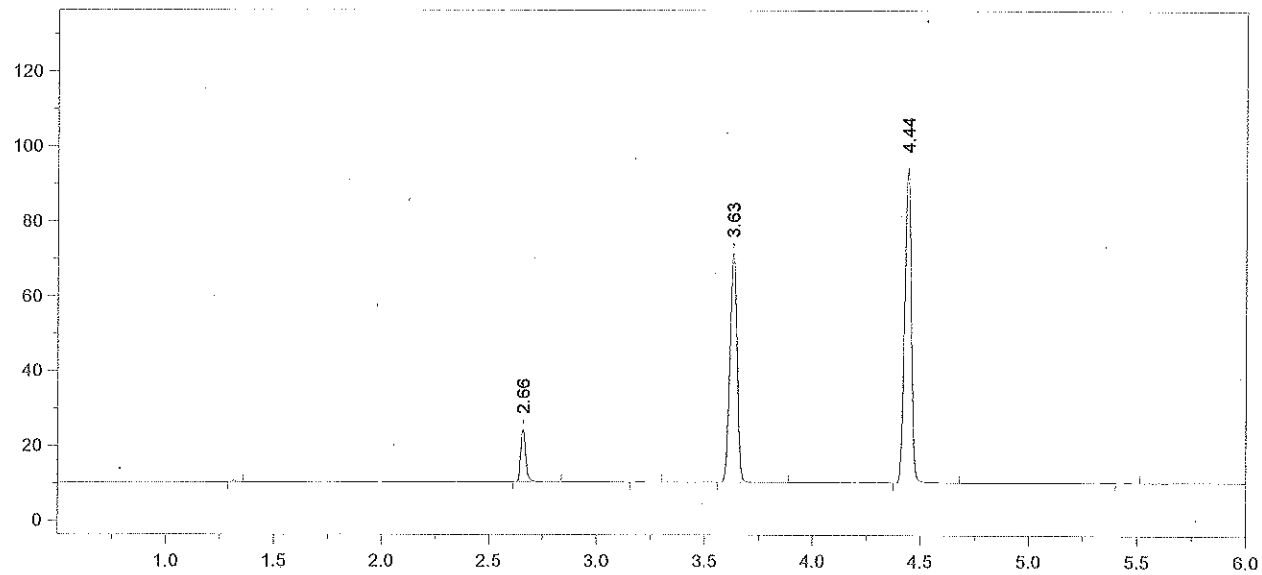
Format File Name = simsolnVFL.met.FMT

Today's Date = 7/9/2015 Today's Time = 12:02:11 AM
Bound File Name = VFL07082015.0039.RAW
Sample Name = .02 DJP
Date Taken = 7/9/2015 12:02:01 AM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07082015.CAL Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	22964	0.0242	0.0197
4	3.63	t-Butanol	134227	0.9882	0.8066
5	4.44	n-Propanol	178229	1.0000	0.8162

AB 7/10/15 15-11-020

p.73 DG



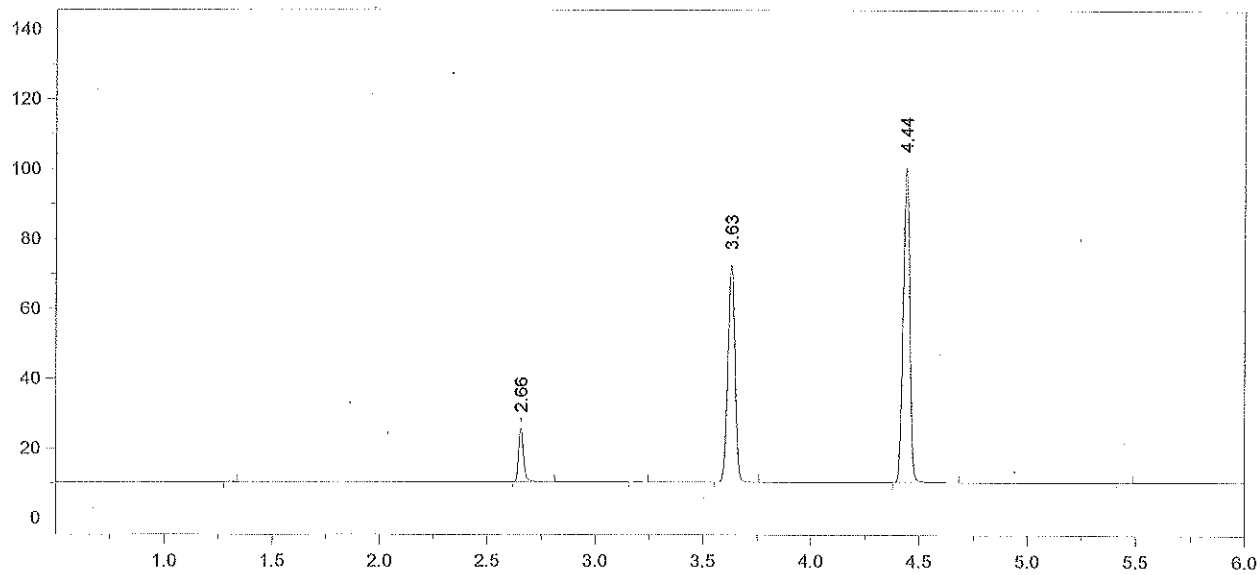
Format File Name = simsolnVFL.met.FMT

Today's Date = 7/9/2015
Today's Time = 12:19:42 AM
Bound File Name = VFL07082015.0040.RAW
Sample Name = .02 DJP
Date Taken = 7/9/2015 12:19:37 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	22568	0.0237	0.0194
4	3.63	t-Butanol	142453	1.0483	0.8556
5	4.44	n-Propanol	178301	1.0000	0.8162

7/10/15 15-11-020

P-74



Format File Name = simsolnVFL.met.FMT

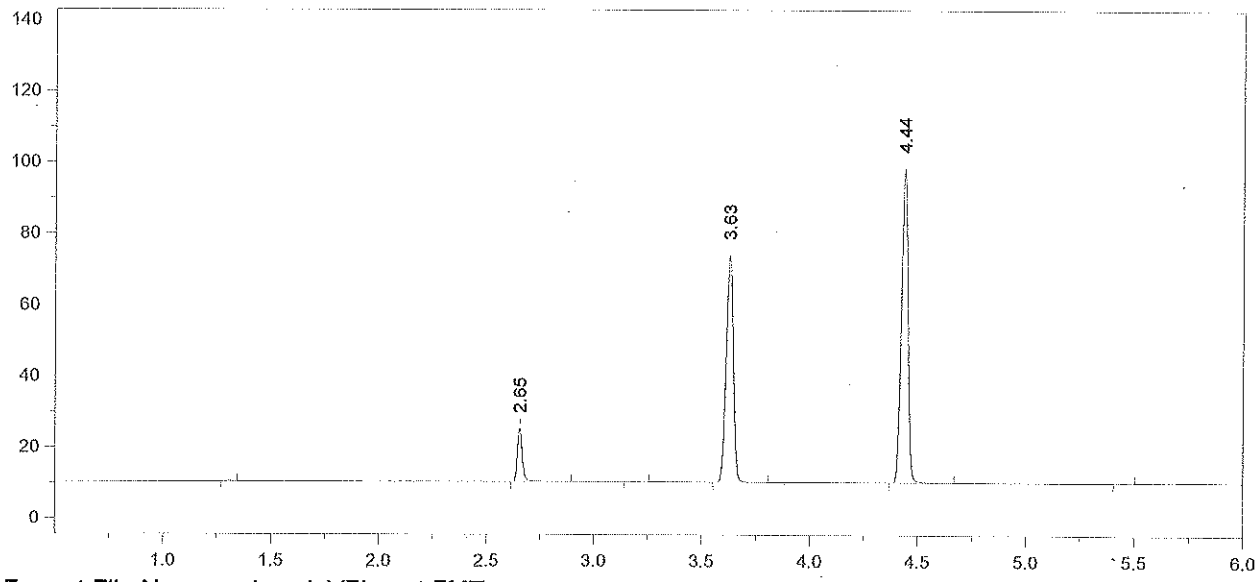
Today's Date = 7/9/2015
Today's Time = 12:33:22 AM
Bound File Name = VFL07082015.0041.RAW
Sample Name = .02 DJP
Date Taken = 7/9/2015 12:33:18 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	24606	0.0241	0.0197
4	3.63	t-Butanol	144171	0.9880	0.8064
5	4.44	n-Propanol	191470	1.0000	0.8162

15-11-020

AB 7/10/15

p.75



Format File Name = simsolnVFL.met.FMT

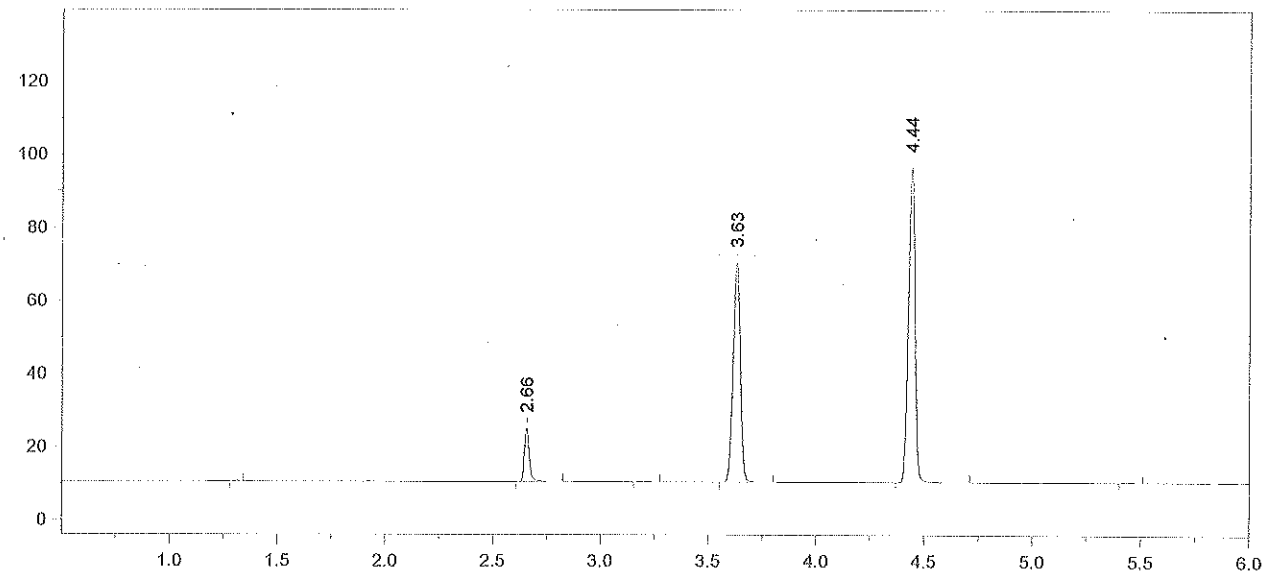
Today's Date = 7/9/2015
Today's Time = 12:51:15 AM
Bound File Name = VFL07082015.0042.RAW
Sample Name = .02 DJP
Date Taken = 7/9/2015 12:51:05 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	24211	0.0242	0.0197
4	3.63	t-Butanol	148119	1.0353	0.8450
5	4.44	n-Propanol	187717	1.0000	0.8162

15-11-20

7/10/15

C.76



Format File Name = simsolnVFL.met.FMT

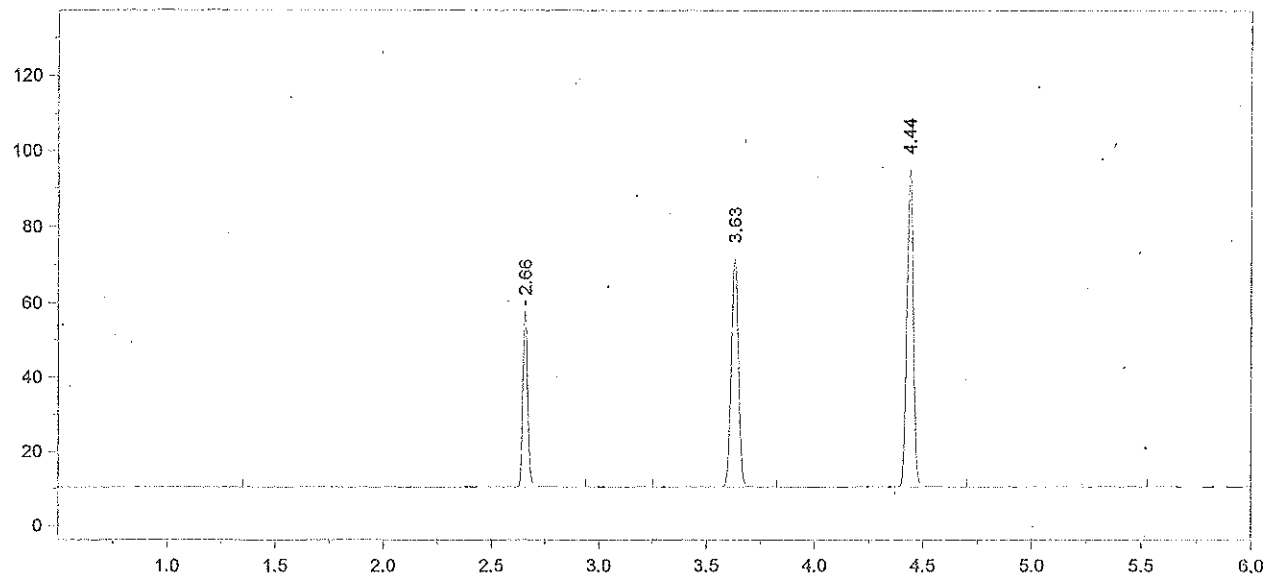
Today's Date = 7/9/2015
Today's Time = 1:04:32 AM
Bound File Name = VFL07082015.0043.RAW
Sample Name = .02 DJP
Date Taken = 7/9/2015 1:04:22 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	23598	0.0241	0.0197
4	3.63	t-Butanol	139894	1.0011	0.8171
5	4.44	n-Propanol	183362	1.0000	0.8162

7/10/15

15-11-020

P.77



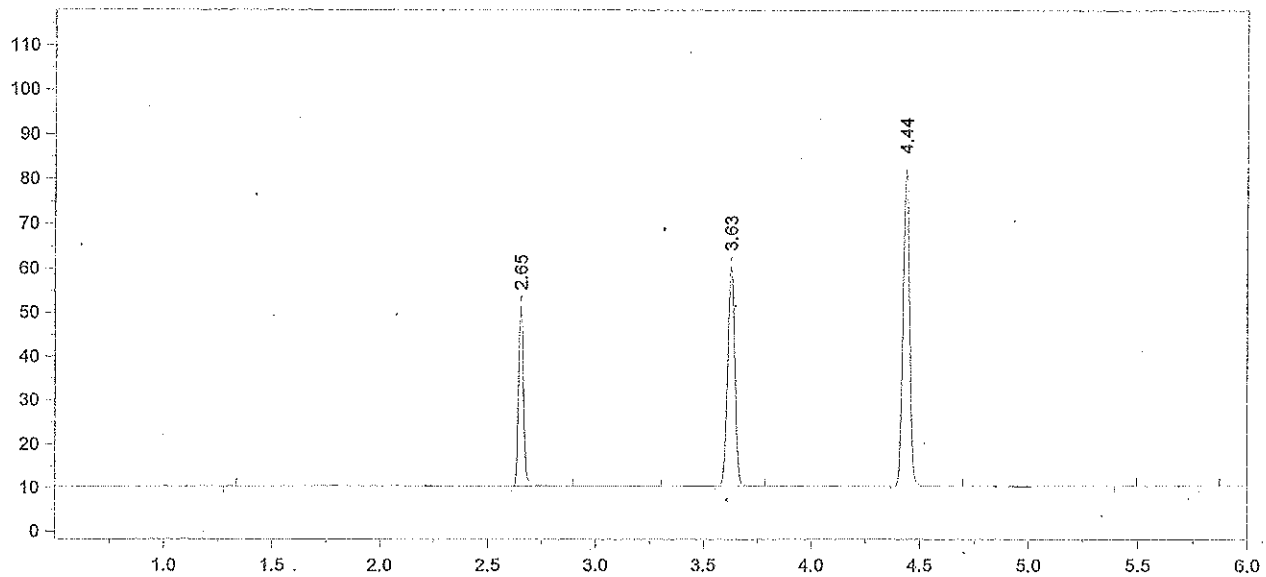
Format File Name = AlcoholVFL.FMT

Today's Date = 7/9/2015
Today's Time = 1:22:36 AM
Bound File Name = VFL07082015.0044.RAW
Sample Name = CCS
Date Taken = 7/9/2015 1:22:29 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	73566	0.0768
4	3.63	t-Butanol	141839	1.0367
5	4.44	n-Propanol	179525	1.0000

15-11-020

7/10/15 P.78



Format File Name = AlcoholVFL.FMT

Today's Date = 7/9/2015
Today's Time = 1:35:51 AM
Bound File Name = VFL07082015.0045.RAW
Sample Name = CCS
Date Taken = 7/9/2015 1:35:44 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	64140	0.0789
4	3.63	t-Butanol	115752	0.9960
5	4.44	n-Propanol	152490	1.0000

CCS MEAN: 0.0778 % ethanol

±5% : 0.0739 - 0.0817

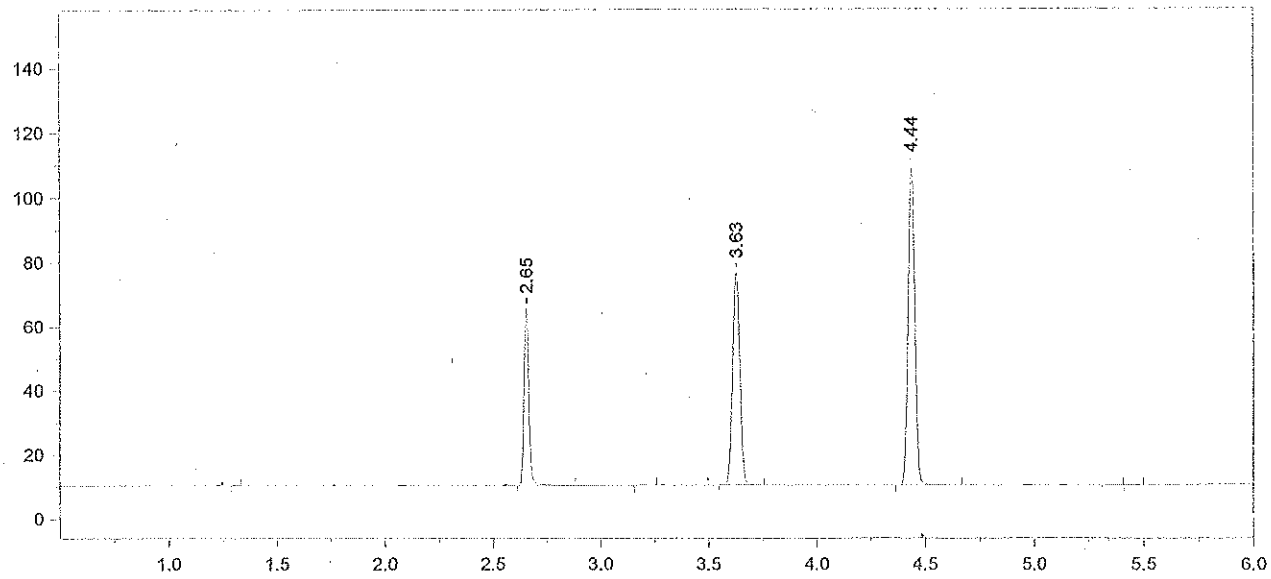
RECOVERY: $\frac{0.078}{0.08}$ = 97.5%

7/9/15

15-11-020

AB 7/10/15

p.79



Format File Name = AlcoholVFL.FMT

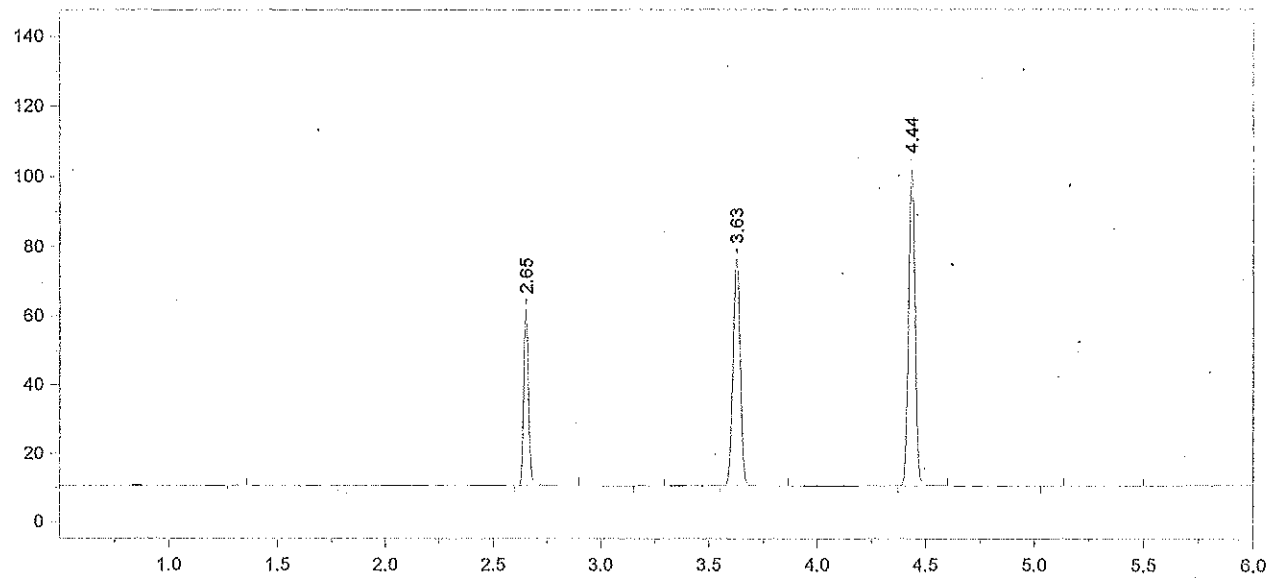
Today's Date = 7/9/2015
Today's Time = 11:01:32 AM
Bound File Name = VFL07082015.0046.RAW
Sample Name = CCS
Date Taken = 7/9/2015 11:01:25 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	85988	0.0773
4	3.63	t-Butanol	153703	0.9667
5	4.44	n-Propanol	208630	1.0000

15-11-020

7/10/15

P.80



Format File Name = AlcoholVFL.FMT

Today's Date = 7/9/2015
Today's Time = 11:17:55 AM
Bound File Name = VFL07082015.0047.RAW
Sample Name = CCS
Date Taken = 7/9/2015 11:17:47 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	79809	0.0771
4	3.63	t-Butanol	152440	1.0303
5	4.44	n-Propanol	194140	1.0000

CCS MEAN: 0.0772 % ethanol

±5% : 0.0733 – 0.0810

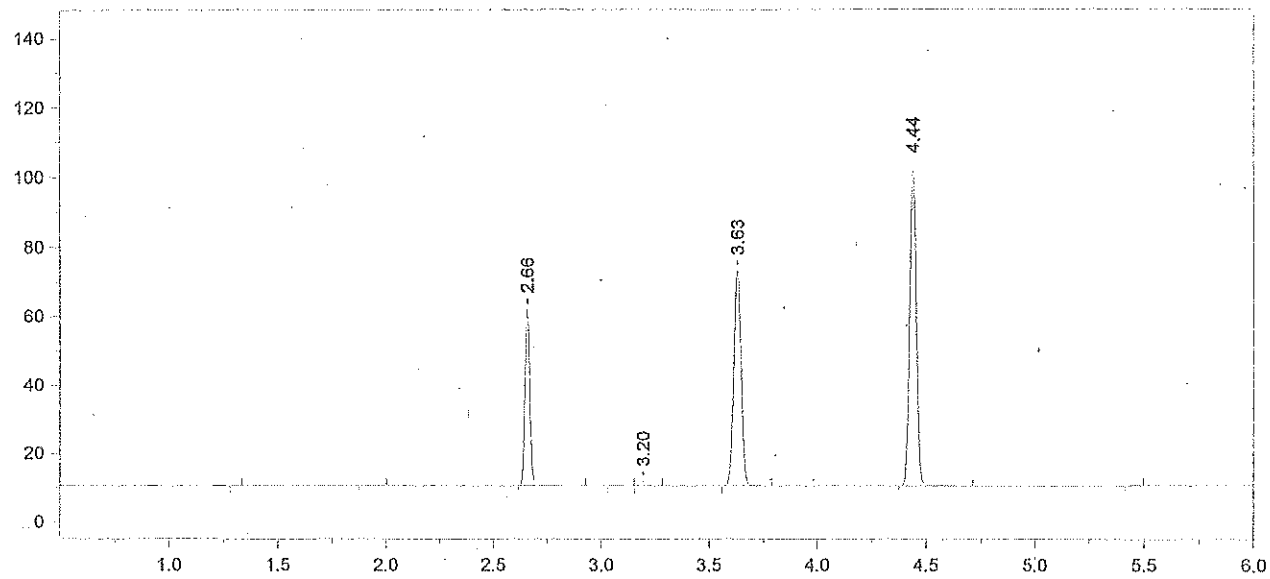
Recovery: $\frac{0.077}{0.08}$ = 96.2%

7/10/15

15-11-020

7/10/15

P.81



Format File Name = AlcoholVFL.FMT

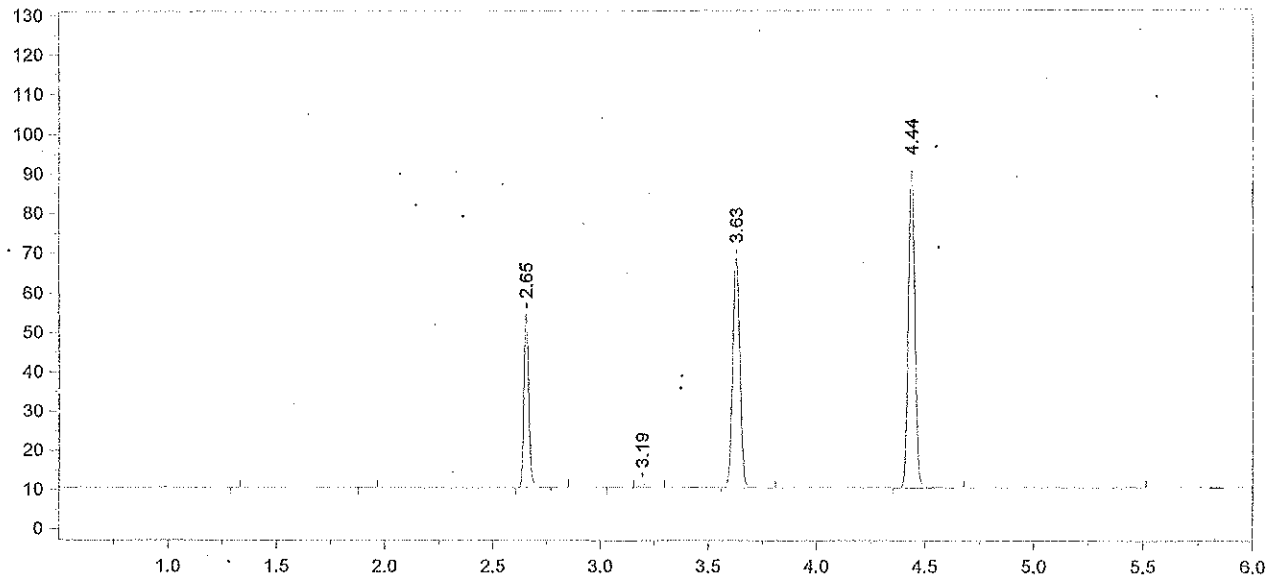
Today's Date = 7/9/2015
Today's Time = 11:31:13 AM
Bound File Name = VFL07082015.0048.RAW
Sample Name = WB
Date Taken = 7/9/2015 11:31:09 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
4	2.66	Ethanol	80627	0.0771
6	3.20	Isopropanol	02338	<0.004
7	3.63	t-Butanol	145415	0.9737
8	4.44	n-Propanol	195948	1.0000

15-11-020

AB 7/10/15

0.82



Format File Name = AlcoholVFL.FMT

Today's Date = 7/9/2015
Today's Time = 11:49:18 AM
Bound File Name = VFL07082015.0049.RAW
Sample Name = WB
Date Taken = 7/9/2015 11:49:10 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	69654	0.0765
5	3.19	Isopropanol	02114	<0.004
6	3.63	t-Butanol	134293	1.0324
7	4.44	n-Propanol	170686	1.0000

WB CONTROL: CLINIQA LOT# 1212090 exp 7/01/15

WB MEAN: 0.0768 % ETHANOL

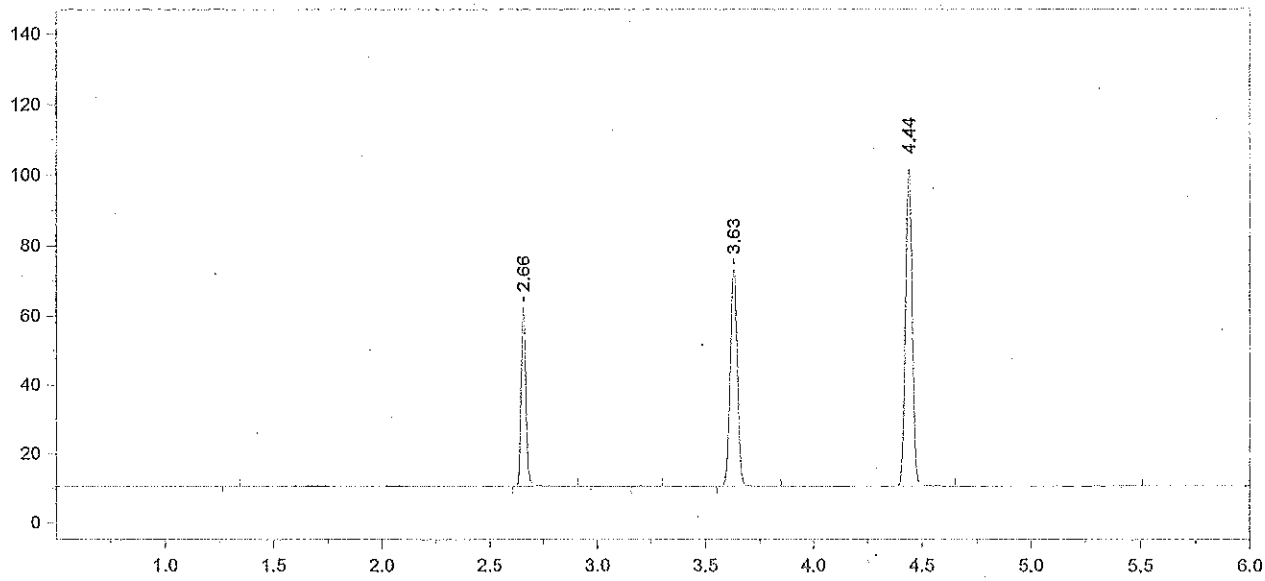
±5% : 0.0729 – 0.0806

RECOVERY: $\frac{0.077}{0.08}$ = 96.2%

7/01/15

15-11-020

AB 7/10/15 P.83



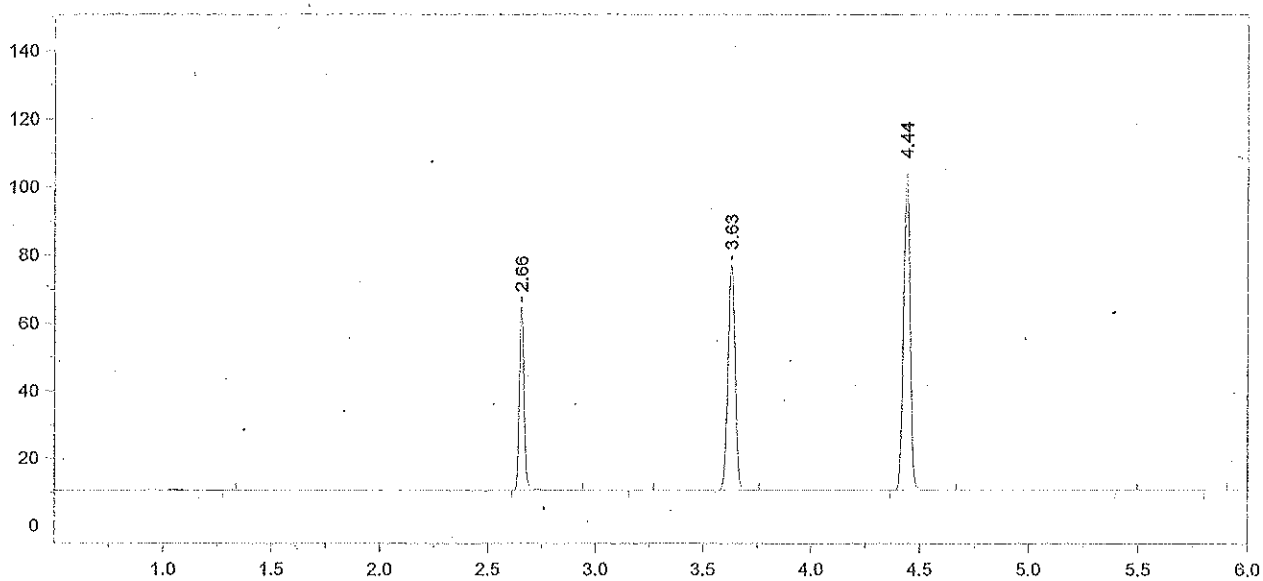
Format File Name = AlcoholVFL.FMT

Today's Date = 7/9/2015
Today's Time = 2:09:08 PM
Bound File Name = VFL07082015.0058.RAW
Sample Name = CCS
Date Taken = 7/9/2015 2:08:59 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	80547	0.0781
4	3.63	t-Butanol	145099	0.9849
5	4.44	n-Propanol	193297	1.0000

15-11-020

AB 7/10/15 p. 84 DC



Format File Name = AlcoholVFL.FMT

Today's Date = 7/9/2015
Today's Time = 2:26:17 PM
Bound File Name = VFL07082015.0059.RAW
Sample Name = CCS
Date Taken = 7/9/2015 2:26:12 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	83984	0.0792
4	3.63	t-Butanol	154371	1.0194
5	4.44	n-Propanol	198701	1.0000

CCS MEAN: 0.0786 % ETHANOL

±5% = 0.0747 - 0.0825

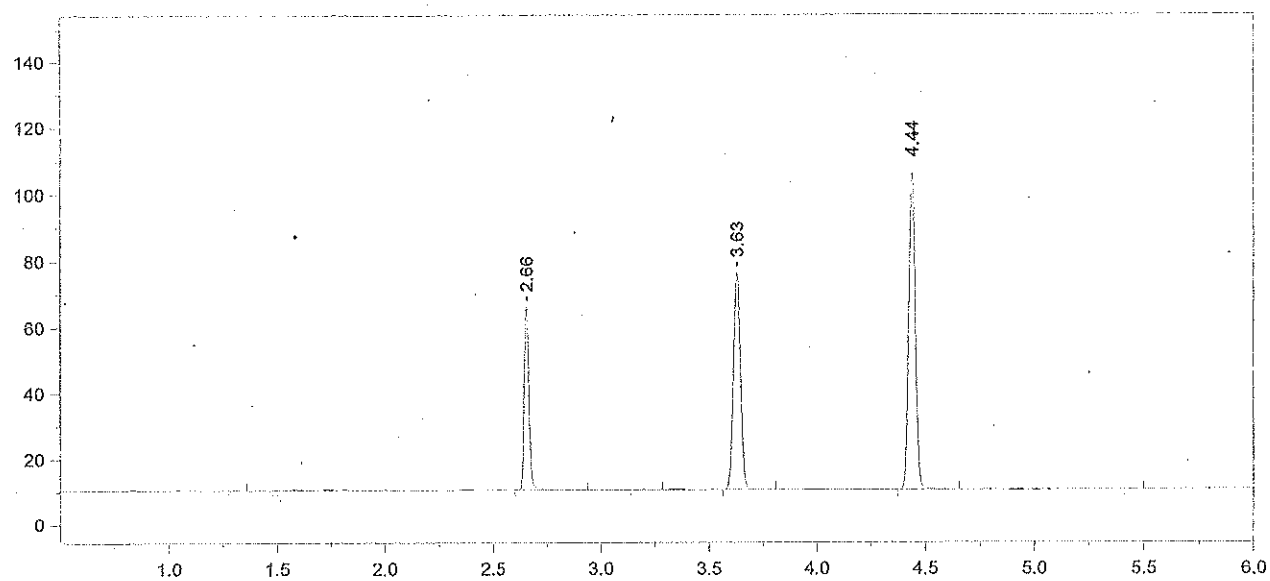
RECOVERY: $\frac{0.078}{0.08}$ = 97.5%

7/10/15

15-11-020

7/10/15

0.85 Dr



Format File Name = AlcoholVFL.FMT

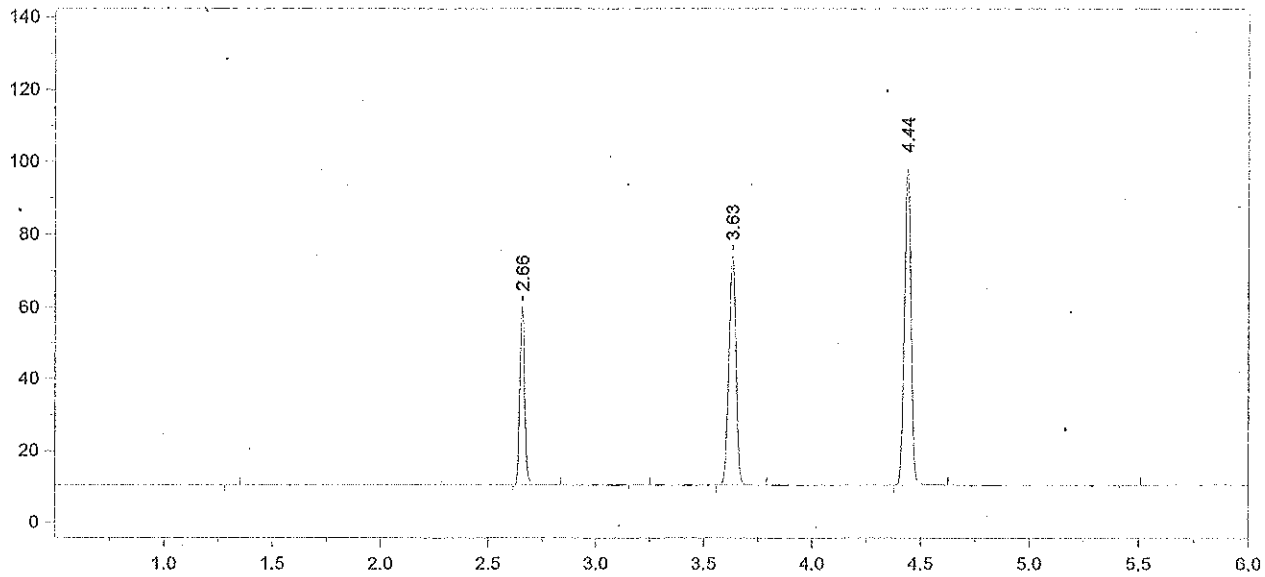
Today's Date = 7/9/2015
Today's Time = 5:16:37 PM
Bound File Name = VFL07082015.0070.RAW
Sample Name = CCS
Date Taken = 7/9/2015 5:16:30 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	86802	0.0799
4	3.63	t-Butanol	152085	0.9803
5	4.44	n-Propanol	203555	1.0000

15-11-020

AB 7/10/15

P.86 AP



Format File Name = AlcoholVFL.FMT

Today's Date = 7/9/2015
Today's Time = 5:33:10 PM
Bound File Name = VFL07082015.0071.RAW
Sample Name = CCS
Date Taken = 7/9/2015 5:33:03 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	76937	0.0774
4	3.63	t-Butanol	147466	1.0386
5	4.44	n-Propanol	186305	1.0000

CCS MEAN: 0.0786 % Ethanol

±5% : 0.0747 - 0.0825

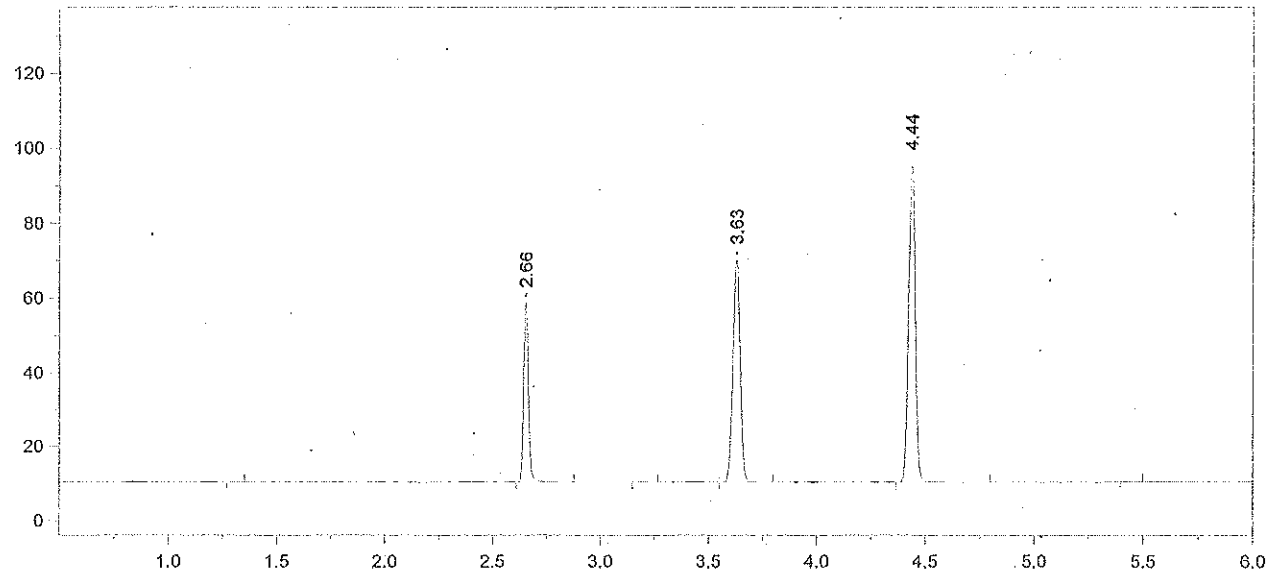
Recovery: $\frac{0.078}{0.08}$ = 97.5%

DR 7/10/15

15-11-020

AB 7/20/15

P.87 88



Format File Name = AlcoholVFL.FMT

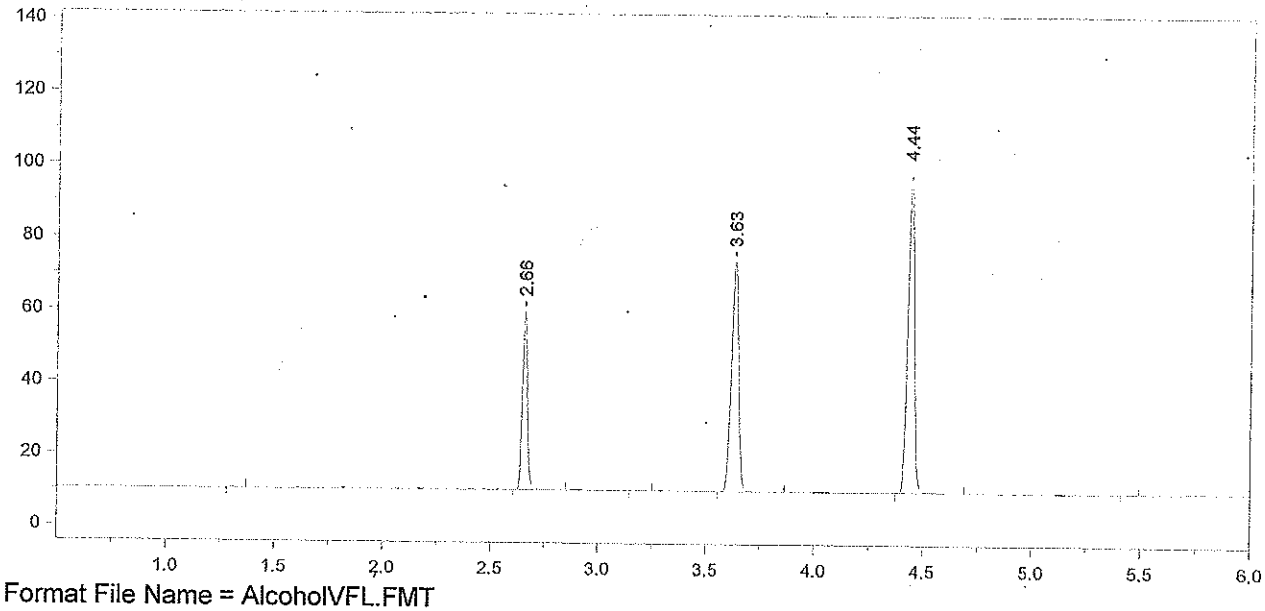
Today's Date = 7/9/2015
Today's Time = 7:53:26 PM
Bound File Name = VFL07082015.0080.RAW
Sample Name = CCS
Date Taken = 7/9/2015 7:53:21 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	75848	0.0783
4	3.63	t-Butanol	138556	1.0012
5	4.44	n-Propanol	181585	1.0000

AB 7/10/15

15-11-020

P.88



Format File Name = AlcoholVFL.FMT

Today's Date = 7/9/2015
Today's Time = 8:08:41 PM
Bound File Name = VFL07082015.0081.RAW
Sample Name = CCS
Date Taken = 7/9/2015 8:08:37 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07082015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	76657	0.0772
4	3.63	t-Butanol	147321	1.0382
5	4.44	n-Propanol	186198	1.0000

CCS MEAN: 0.0777 % ethanol

±5% : 0.0738 – 0.0816

Recovery: $\frac{0.078}{0.08}$ = 97.5% 07/10/15

15-11-2020

AB 21/10/15

p. 89

Chrom Perfect Sequence File

File Name = C:\Alcohol Data\VFL07062015\VFL07062015.SEQ
Version = 4
File Date = 7/7/2015 9:38:49 AM

Entry #	Raw File Name	Method File Name	Sample Name	Sample Wt.	Int. Std. Amount
1	VFL07062015.0001.raw	Blood Alc temp VFL.MET	BLANK	1.00	1.00
2	VFL07062015.0002.raw	Blood Alc temp VFL.MET	TMX	1.00	1.00
3	VFL07062015.0003.raw	Blood Alc temp VFL.MET	STD A	1.00	1.00
4	VFL07062015.0004.raw	Blood Alc temp VFL.MET	STD B	1.00	1.00
5	VFL07062015.0005.raw	Blood Alc temp VFL.MET	STD C	1.00	1.00
6	VFL07062015.0006.raw	Blood Alc temp VFL.MET	STD D	1.00	1.00
7	VFL07062015.0007.raw	Blood Alc temp VFL.MET	STD E	1.00	1.00
8	VFL07062015.0008.raw	Blood Alc temp VFL.MET	AQ	1.00	1.00
9	VFL07062015.0009.raw	Blood Alc temp VFL.MET	AQ	1.00	1.00
10	VFL07062015.0010.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
11	VFL07062015.0011.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
12	VFL07062015.0012.raw	simsoln.met	.02 DJP	1.00	1.00
13	VFL07062015.0013.raw	simsoln.met	.02 DJP	1.00	1.00
14	VFL07062015.0014.raw	simsoln.met	.02 DJP	1.00	1.00
15	VFL07062015.0015.raw	simsoln.met	.02 DJP	1.00	1.00
16	VFL07062015.0016.raw	simsoln.met	.02 DJP	1.00	1.00
17	VFL07062015.0017.raw	simsoln.met	.02 DJP	1.00	1.00
18	VFL07062015.0018.raw	simsoln.met	.02 DJP	1.00	1.00
19	VFL07062015.0019.raw	simsoln.met	.02 ALB	1.00	1.00
20	VFL07062015.0020.raw	simsoln.met	.02 ALB	1.00	1.00
21	VFL07062015.0021.raw	simsoln.met	.02 ALB	1.00	1.00
22	VFL07062015.0022.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
23	VFL07062015.0023.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
24	VFL07062015.0024.raw	simsoln.met	.02 ALB	1.00	1.00
25	VFL07062015.0025.raw	simsoln.met	.02 ALB	1.00	1.00
26	VFL07062015.0026.raw	simsoln.met	.02 ALB	1.00	1.00
27	VFL07062015.0027.raw	simsoln.met	.02 ALB	1.00	1.00
28	VFL07062015.0028.raw	simsoln.met	.40 DJP	1.00	1.00
29	VFL07062015.0029.raw	simsoln.met	.40 DJP	1.00	1.00
30	VFL07062015.0030.raw	simsoln.met	.40 DJP	1.00	1.00
31	VFL07062015.0031.raw	simsoln.met	.40 DJP	1.00	1.00
32	VFL07062015.0032.raw	simsoln.met	.40 DJP	1.00	1.00
33	VFL07062015.0033.raw	simsoln.met	.40 DJP	1.00	1.00
34	VFL07062015.0034.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
35	VFL07062015.0035.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
36	VFL07062015.0036.raw	simsoln.met	.40 DJP	1.00	1.00
37	VFL07062015.0037.raw	simsoln.met	.40 ALB	1.00	1.00
38	VFL07062015.0038.raw	simsoln.met	.40 ALB	1.00	1.00
39	VFL07062015.0039.raw	simsoln.met	.40 ALB	1.00	1.00
40	VFL07062015.0040.raw	simsoln.met	.40 ALB	1.00	1.00
41	VFL07062015.0041.raw	simsoln.met	.40 ALB	1.00	1.00
42	VFL07062015.0042.raw	simsoln.met	.40 ALB	1.00	1.00
43	VFL07062015.0043.raw	simsoln.met	.40 ALB	1.00	1.00
44	VFL07062015.0044.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
45	VFL07062015.0045.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
46	VFL07062015.0046.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
47	VFL07062015.0047.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
48	VFL07062015.0048.raw	simsoln.met	0.10 RM	1.00	1.00
49	VFL07062015.0049.raw	simsoln.met	0.10 RM	1.00	1.00
50	VFL07062015.0050.raw	simsoln.met	0.10 RM	1.00	1.00
51	VFL07062015.0051.raw	simsoln.met	0.10 RM	1.00	1.00
52	VFL07062015.0052.raw	simsoln.met	0.10 RM	1.00	1.00
53	VFL07062015.0053.raw	simsoln.met	0.10 RM	1.00	1.00
54	VFL07062015.0054.raw	simsoln.met	0.10 RM	1.00	1.00
55	VFL07062015.0055.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
56	VFL07062015.0056.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
57	VFL07062015.0057.raw	simsoln.met	0.10 DP	1.00	1.00
58	VFL07062015.0058.raw	simsoln.met	0.10 DP	1.00	1.00
59	VFL07062015.0059.raw	simsoln.met	0.10 DP	1.00	1.00
60	VFL07062015.0060.raw	simsoln.met	0.10 DP	1.00	1.00
61	VFL07062015.0061.raw	simsoln.met	0.10 DP	1.00	1.00
62	VFL07062015.0062.raw	simsoln.met	0.10 DP	1.00	1.00

Entry #	Raw File Name	Method File Name	Sample Name	Sample Wt.	Int. Std. Amount
63	VFL07062015.0063.raw	simsoln.met	0.10 DP	1.00	1.00
64	VFL07062015.0064.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
65	VFL07062015.0065.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00

91

AB 7/10/15

15-11-020 DATE 47

DS 7/10/15

File Name: C:\Methods\VFL07062015.CAL
Version: 7

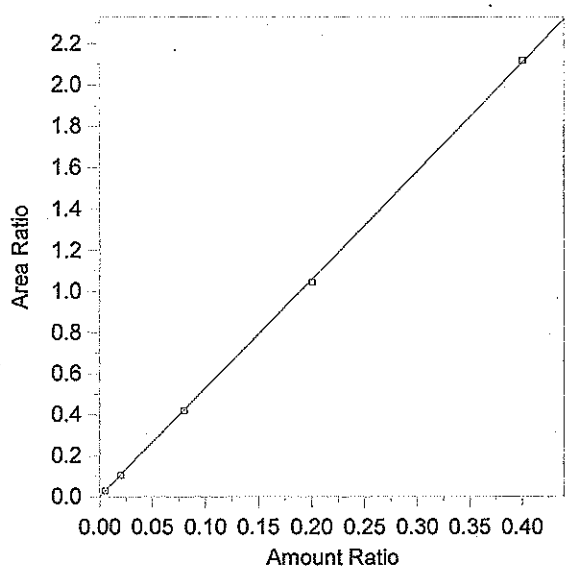
Creator:
Description:
Reason for change:

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:	2.654 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 = 5.272377 X + 0

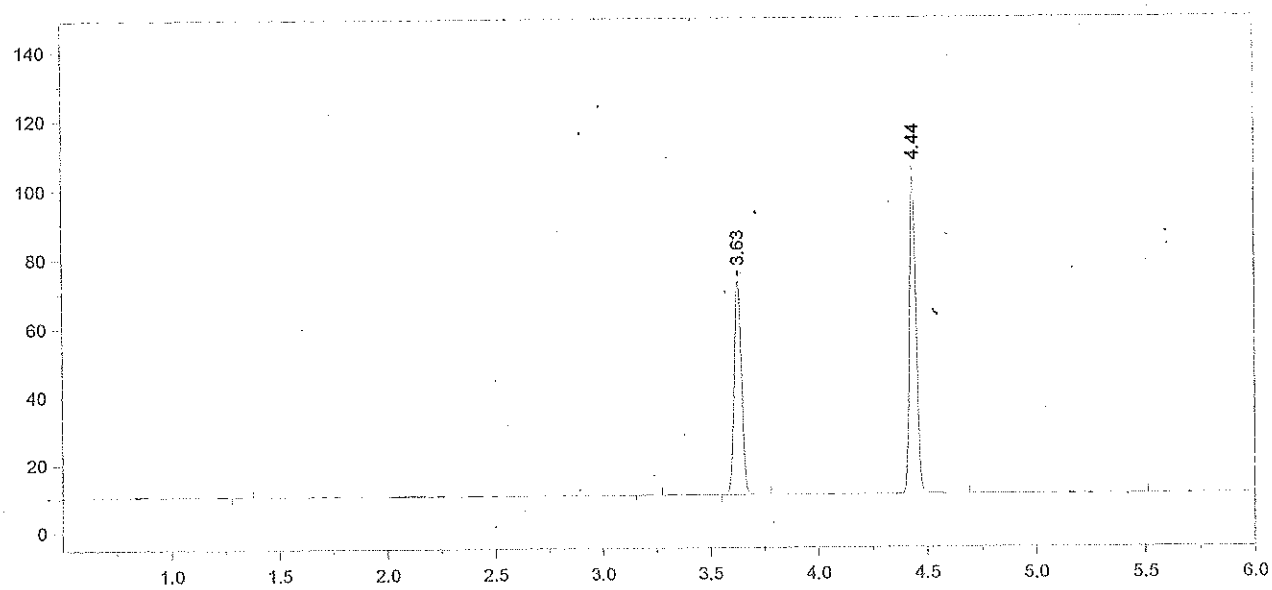
Linear fit with equal weighting, forced to origin

Coefficient of determination:	0.9998957
Average error:	1.279%
Average CF:	5.213304
RSD:	1.369%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source	Date and time
1	(0.0836)	(85146)	--	--	0.0836	85146	Manual	8/13/2014 9:33:12 AM
2	0.005	4577.314	915462.8	-0.369	0.005	2.626454E-02	C:\Alcohol Data\VFL07062015\VFL07062015.0003.BND	7/6/2015 11:31:52 AM
3	0.02	19760.17	988008.5	-3.214	0.02	0.1020583	C:\Alcohol Data\VFL07062015\VFL07062015.0004.BND	7/6/2015 11:45:04 AM
4	0.08	76909.98	961374.8	-1.028	0.08	0.4174531	C:\Alcohol Data\VFL07062015\VFL07062015.0005.BND	7/6/2015 12:01:33 PM
5	0.2	193129.7	965648.5	-1.386	0.2	1.039856	C:\Alcohol Data\VFL07062015\VFL07062015.0006.BND	7/6/2015 12:18:15 PM
6	0.4	399694.3	999235.8	0.396	0.4	2.117299	C:\Alcohol Data\VFL07062015\VFL07062015.0007.BND	7/6/2015 12:32:14 PM

AB 7/10/15

15-11-020 92



Format File Name = AlcoholVFL.FMT

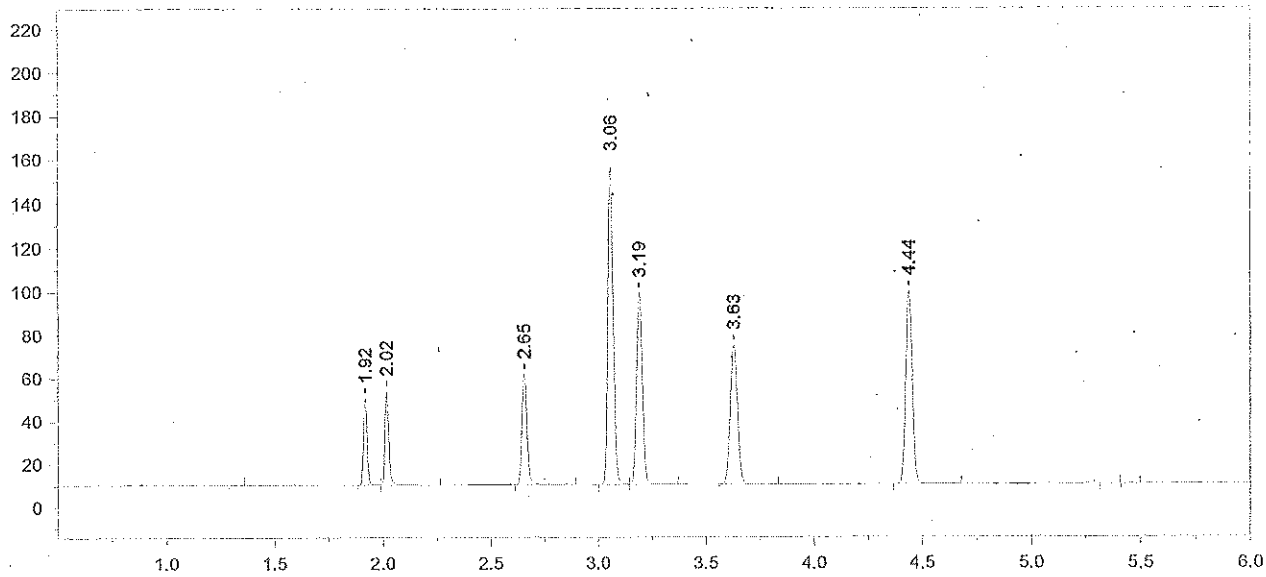
Today's Date = 7/7/2015
Today's Time = 9:34:04 AM
Bound File Name = VFL07062015.0001.RAW
Sample Name = BLANK
Date Taken = 7/6/2015 11:00:01 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	3.63	t-Butanol	144232	0.9533
4	4.44	n-Propanol	196681	1.0000

93

AB 7/10/15

VS-11-020



Format File Name = AlcoholVFL.FMT

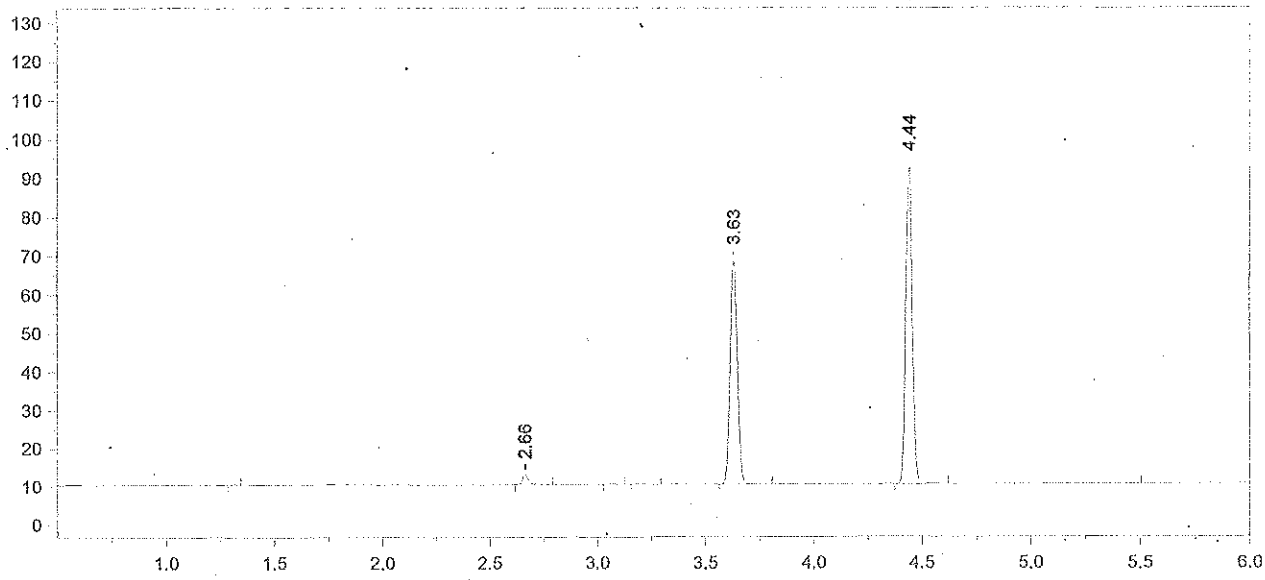
Today's Date = 7/7/2015
Today's Time = 9:34:09 AM
Bound File Name = VFL07062015.0002.RAW
Sample Name = TMX
Date Taken = 7/6/2015 11:15:12 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	1.92	Acetaldehyde	47546	0.0695
3	2.02	Methanol	55100	0.1232
4	2.65	Ethanol	80788	0.0804
5	3.06	Acetone	250985	0.0657
6	3.19	Isopropanol	167407	0.0848
7	3.63	t-Butanol	149163	1.0176
8	4.44	n-Propanol	190553	1.0000

94

AB 7/10/15

15-11-020

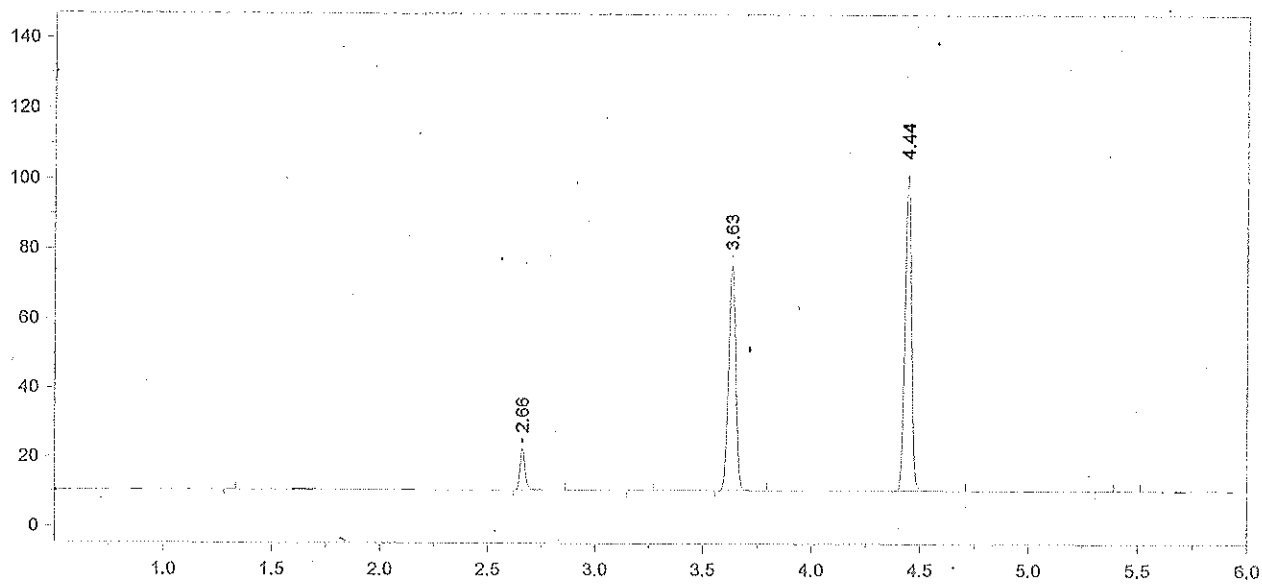


Format File Name = AlcoholVFL.FMT

Today's Date = 7/7/2015
Today's Time = 9:34:15 AM
Bound File Name = VFL07062015.0003.RAW
Sample Name = STD A
Date Taken = 7/6/2015 11:31:46 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	04577	0.0050
5	3.63	t-Butanol	134977	1.0068
6	4.44	n-Propanol	174277	1.0000

AS 7/10/15
15-11-0120

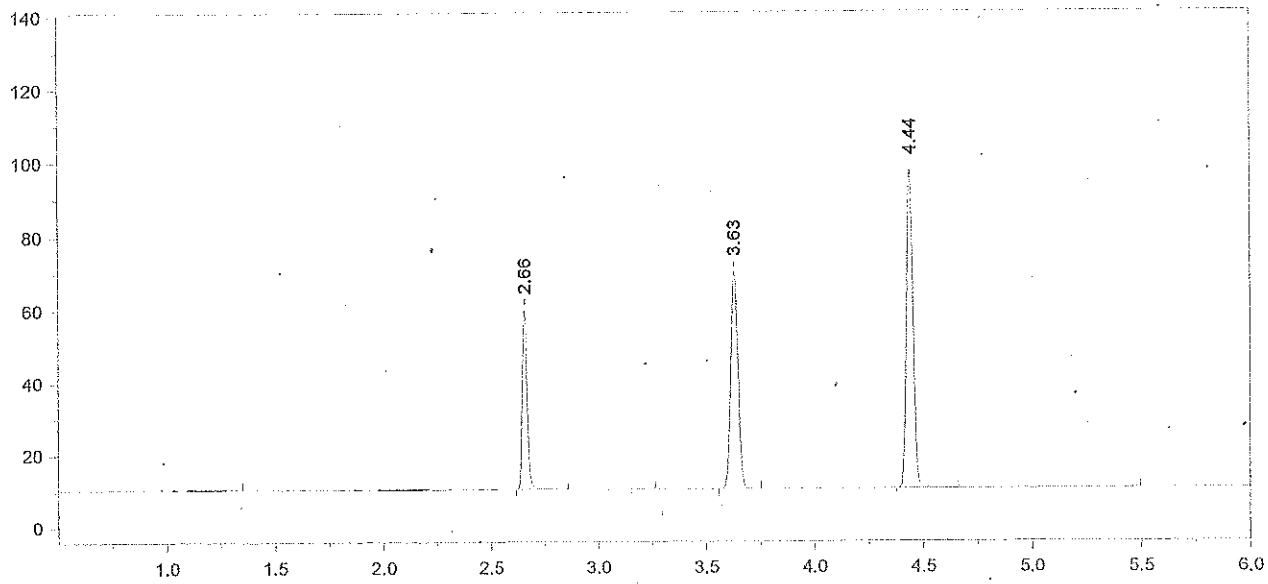


Format File Name = AlcoholVFL.FMT

Today's Date = 7/7/2015
Today's Time = 9:34:23 AM
Bound File Name = VFL07062015.0004.RAW
Sample Name = STD B
Date Taken = 7/6/2015 11:44:56 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	19760	0.0194
4	3.63	t-Butanol	150903	1.0131
5	4.44	n-Propanol	193616	1.0000

AB 7/10/15 15-11-020 QC



Format File Name = AlcoholVFL.FMT

Today's Date = 7/7/2015
Today's Time = 9:34:29 AM
Bound File Name = VFL07062015.0005.RAW
Sample Name = STD C
Date Taken = 7/6/2015 12:01:27 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07062015.CAL
Calibration Version = 7

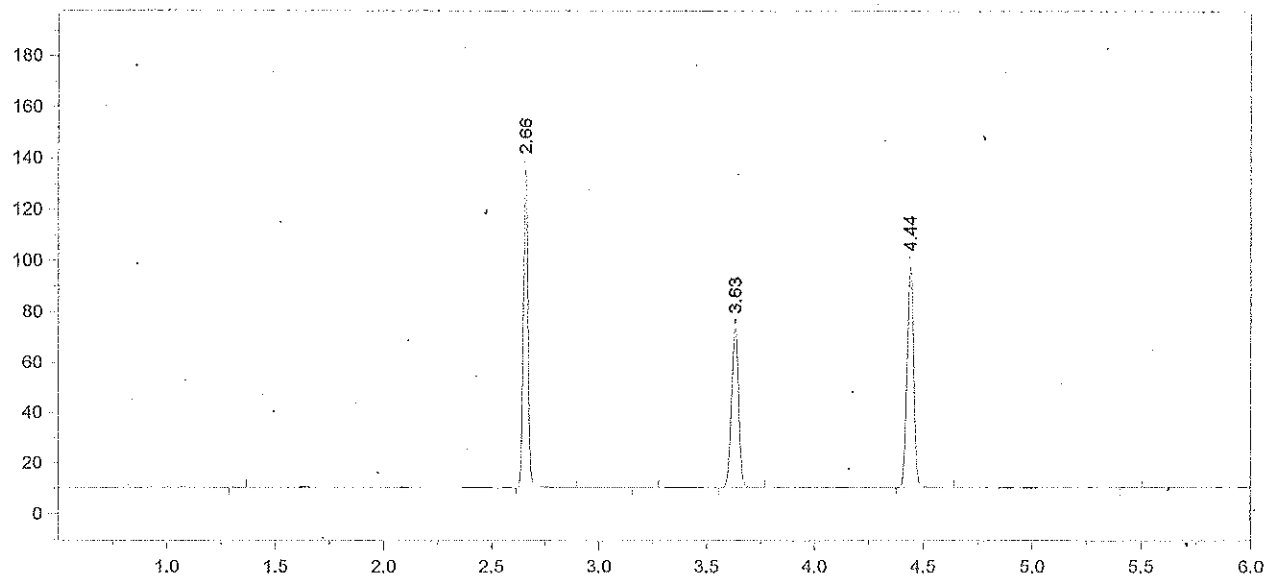
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	76910	0.0792
4	3.63	t-Butanol	138569	0.9777
5	4.44	n-Propanol	184236	1.0000

97

AS 7/10/15

15-11-020 ~~02/10-03~~

DS 07/10/15



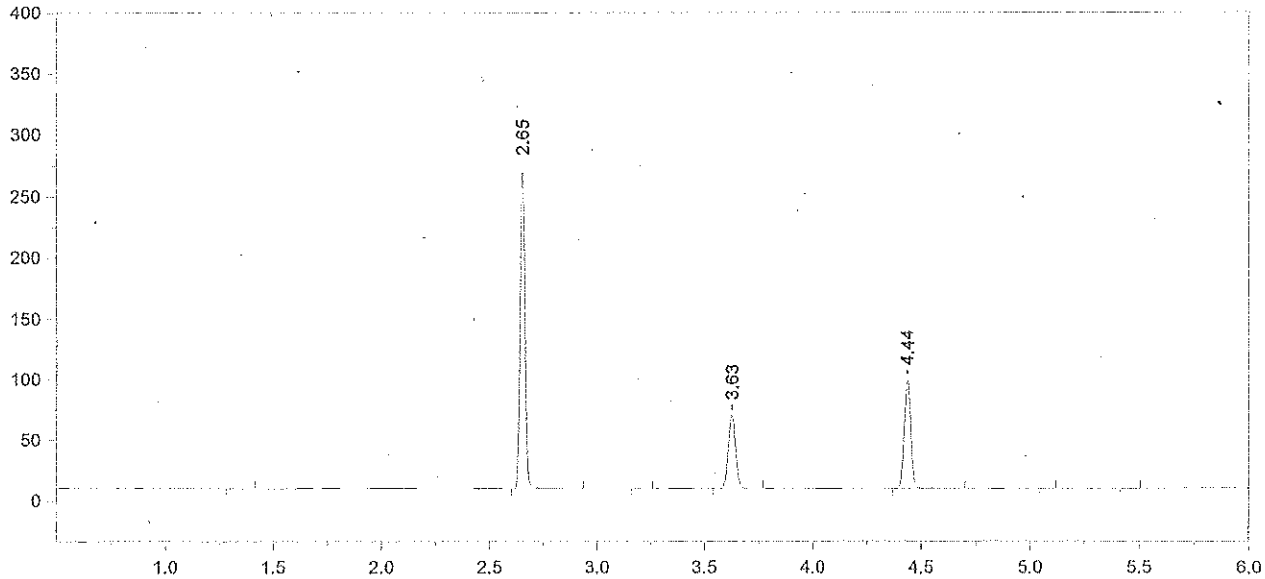
Format File Name = AlcoholVFL.FMT

Today's Date = 7/7/2015 Today's Time = 9:34:36 AM
Bound File Name = VFL07062015.0006.RAW
Sample Name = STD D
Date Taken = 7/6/2015 12:18:06 PM VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07062015.CAL Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	193130	0.1972
4	3.63	t-Butanol	145612	1.0192
5	4.44	n-Propanol	185727	1.0000

98

AB 7/10/15 15-11-820



Format File Name = AlcoholVFL.FMT

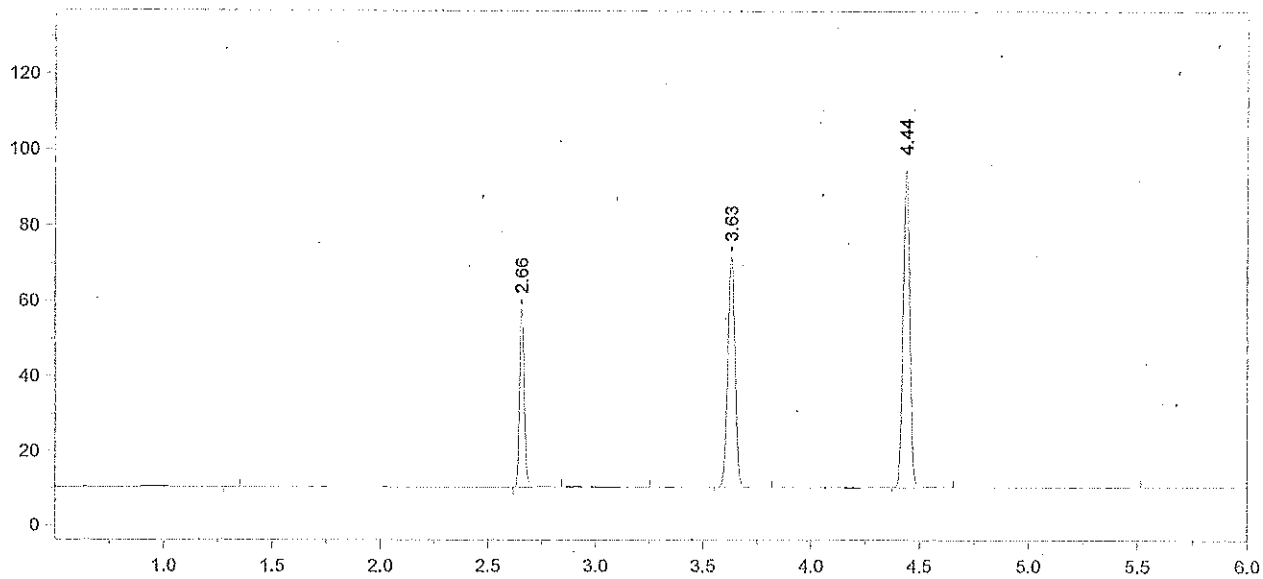
Today's Date = 7/7/2015
Today's Time = 9:34:41 AM
Bound File Name = VFL07062015.0007.RAW
Sample Name = STD E
Date Taken = 7/6/2015 12:32:04 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	399694	0.4016
4	3.63	t-Butanol	140232	0.9656
5	4.44	n-Propanol	188776	1.0000

99

AS 7/10/15

1511-020



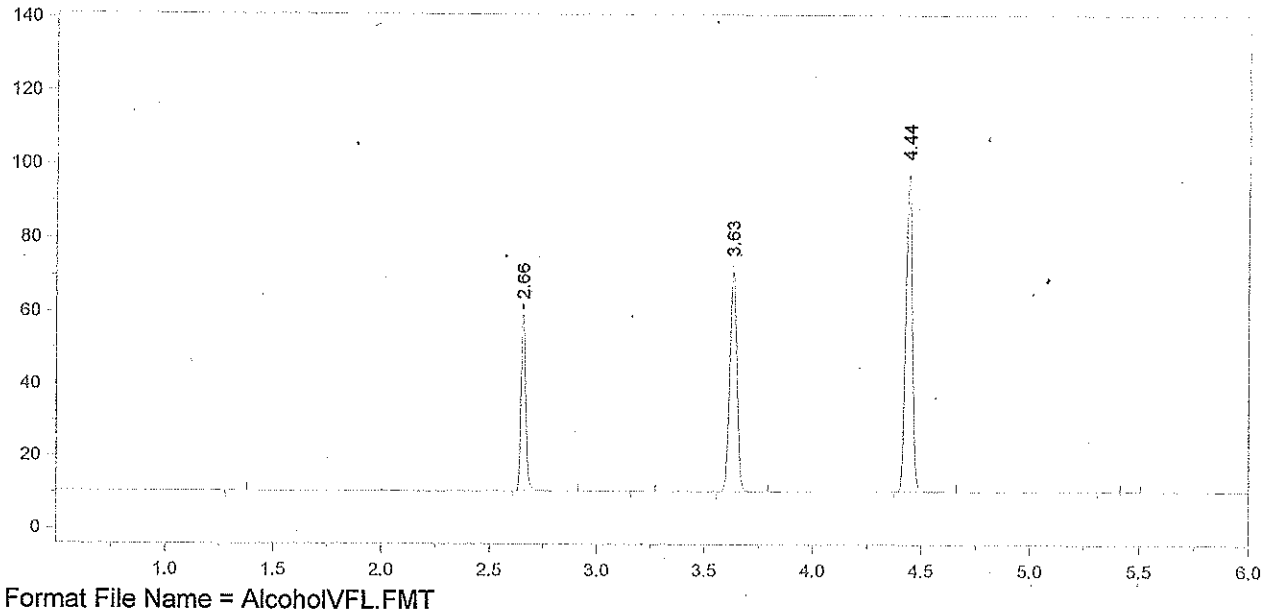
Format File Name = AlcoholVFL.FMT

Today's Date = 7/6/2015
Today's Time = 12:49:37 PM
Bound File Name = VFL07062015.0008.RAW
Sample Name = AQ
Date Taken = 7/6/2015 12:49:33 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	73640	0.0779
4	3.63	t-Butanol	142342	1.0323
5	4.44	n-Propanol	179245	1.0000

KB 7/10/15
15-11-020

Chrom Perfect Chromatogram Report



Format File Name = AlcoholVFL.FMT

Today's Date = 7/6/2015
Today's Time = 1:03:37 PM
Bound File Name = VFL07062015.0009.RAW
Sample Name = AQ
Date Taken = 7/6/2015 1:03:33 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	76887	0.0787
4	3.63	t-Butanol	139799	0.9805
5	4.44	n-Propanol	185338	1.0000

AQ MEAN = 0.0783 % ETHANOL

±5% : 0.0744 - 0.0822

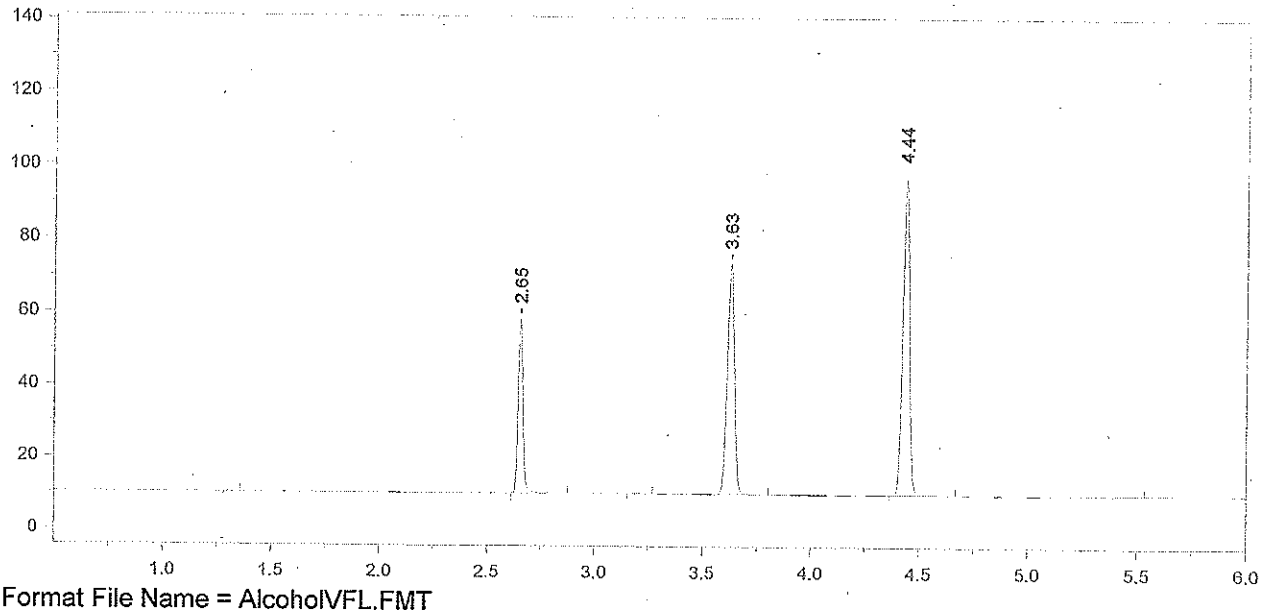
Recovery : $\frac{0.078}{0.08}$ = 97.5%

7/8/15

AB 7/10/15

1511-020

101



Format File Name = AlcoholVFL.FMT

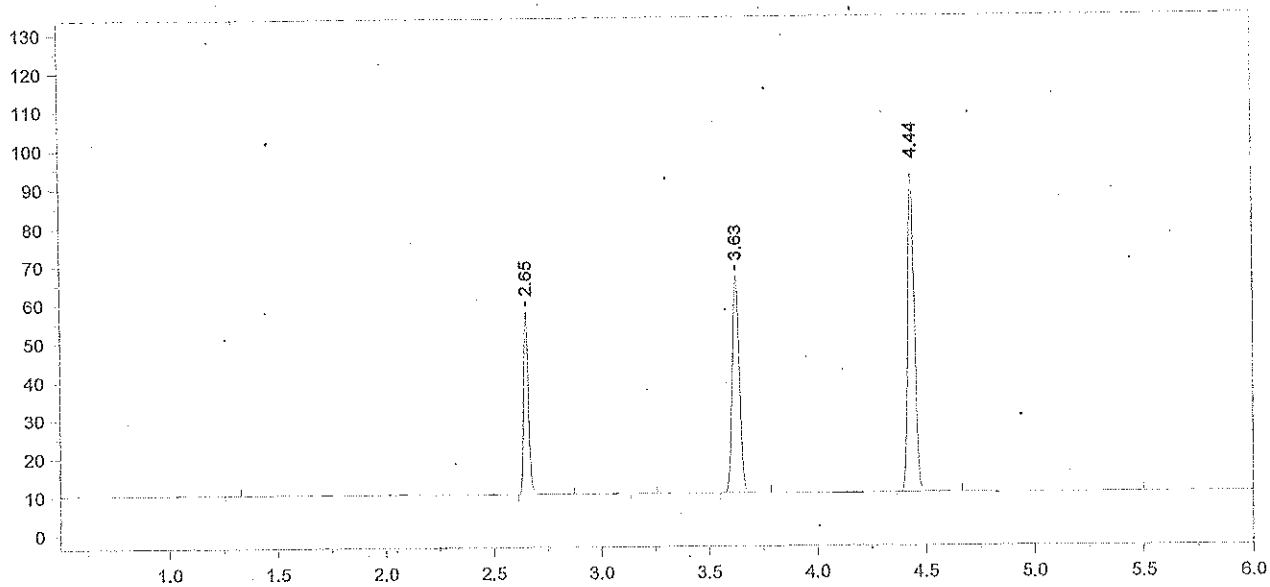
Today's Date = 7/6/2015
Today's Time = 1:21:02 PM
Bound File Name = VFL07062015.0010.RAW
Sample Name = CCS
Date Taken = 7/6/2015 1:20:57 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	75092	0.0771
4	3.63	t-Butanol	146322	1.0295
5	4.44	n-Propanol	184756	1.0000

AB 7/10/15

102

15-11-020



Format File Name = AlcoholVFL.FMT

Today's Date = 7/6/2015
Today's Time = 1:35:17 PM
Bound File Name = VFL07062015.0011.RAW
Sample Name = CCS
Date Taken = 7/6/2015 1:35:13 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	74115	0.0802
4	3.63	t-Butanol	130457	0.9678
5	4.44	n-Propanol	175226	1.0000

CCS mean: 0.0786 % ethanol

±5%: 0.0747 - 0.0825

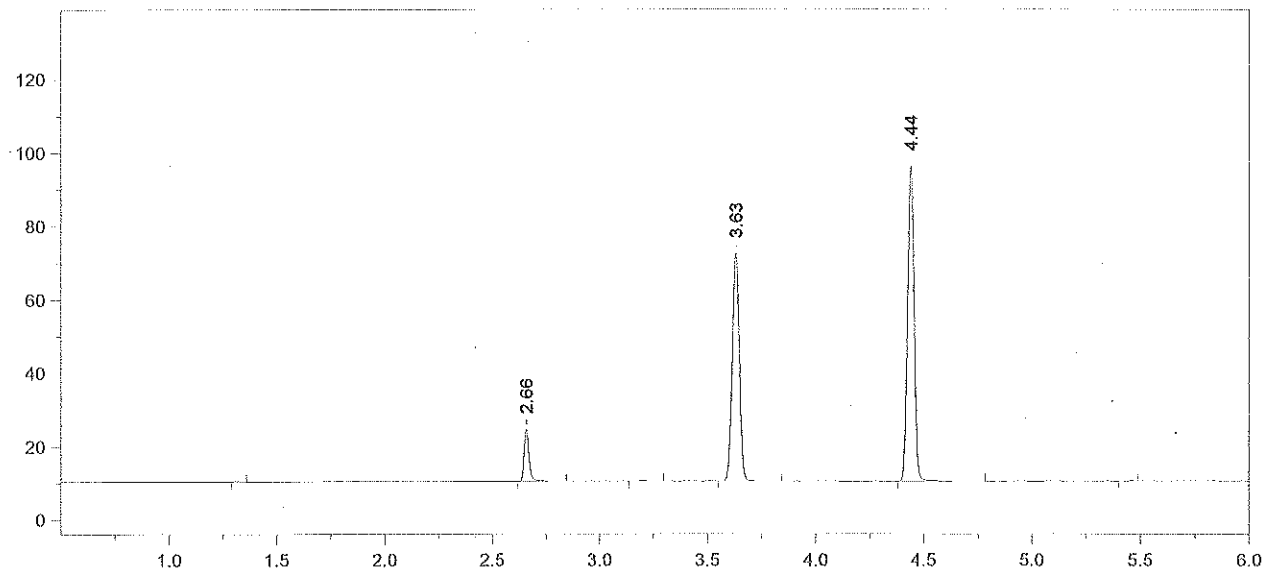
Recovery: $\frac{0.078}{0.08}$ = 97.5%

DS 7/8/15

 103

AB 7/10/15 15-11-020 ~~59~~

Chrom Perfect Chromatogram Report



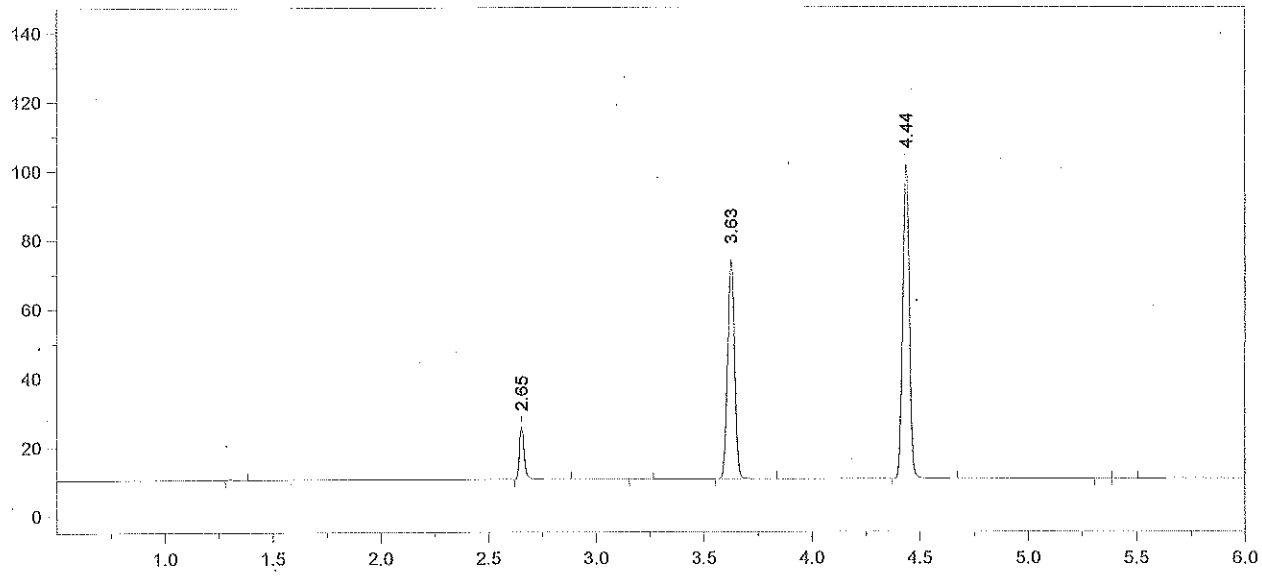
Format File Name = simsolnVFL.met.FMT

Today's Date = 7/6/2015
Today's Time = 1:52:28 PM
Bound File Name = VFL07062015.0012.RAW
Sample Name = .02 DJP
Date Taken = 7/6/2015 1:52:22 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	22695	0.0236	0.0193
4	3.63	t-Butanol	144306	1.0294	0.8402
5	4.44	n-Propanol	182222	1.0000	0.8162

07/06/15
104

AB 7/10/15
15-11-020
07/06/15



Format File Name = simsolnVFL.met.FMT

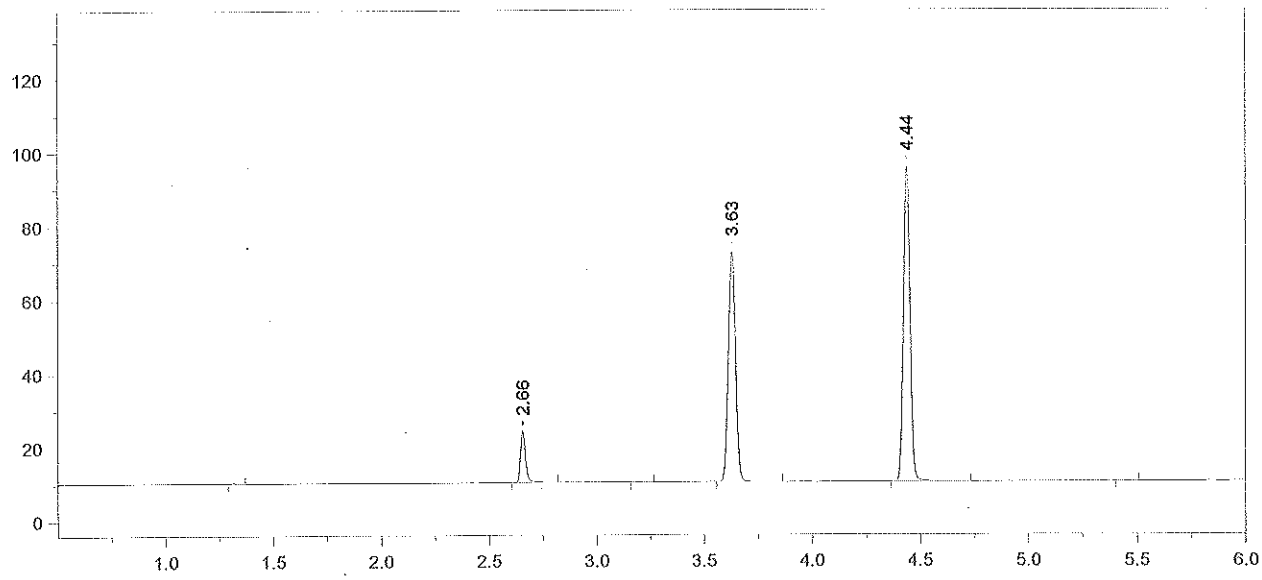
Today's Date = 7/6/2015
Today's Time = 2:05:46 PM
Bound File Name = VFL07062015.0013.RAW
Sample Name = .02 DJP
Date Taken = 7/6/2015 2:05:37 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	24483	0.0239	0.0195
4	3.63	t-Butanol	146734	0.9831	0.8024
5	4.44	n-Propanol	194017	1.0000	0.8162

105

1571-020

Chrom Perfect Chromatogram Report



Format File Name = simsolnVFL.met.FMT

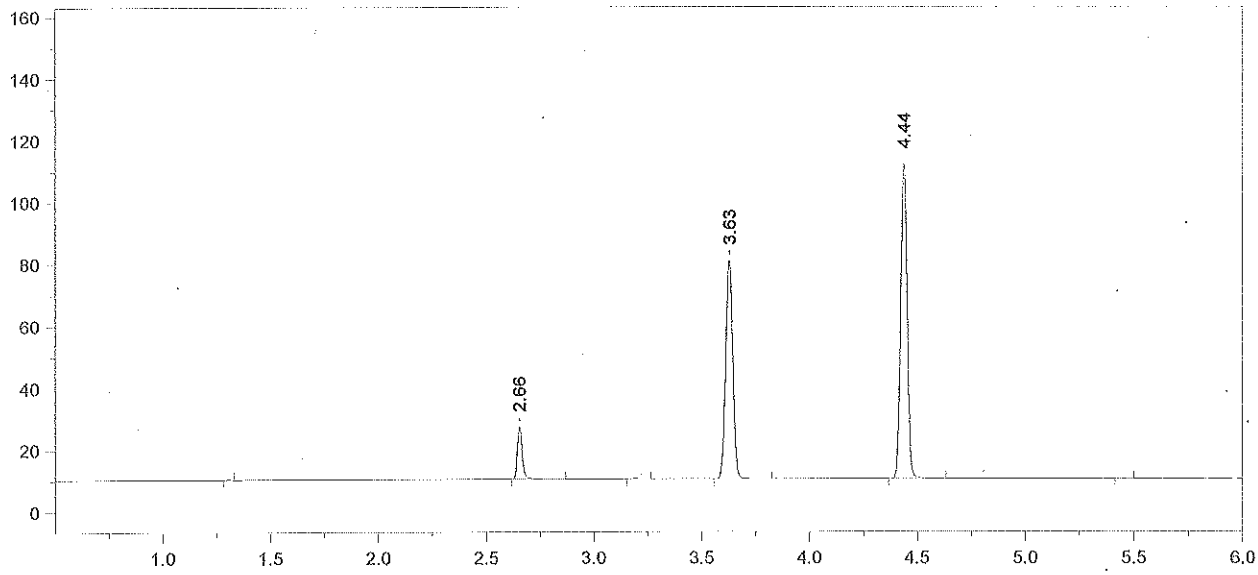
Today's Date = 7/6/2015
Today's Time = 2:23:51 PM
Bound File Name = VFL07062015.0014.RAW
Sample Name = .02 DJP
Date Taken = 7/6/2015 2:23:46 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	22363	0.0234	0.0191
4	3.63	t-Butanol	144060	1.0315	0.8419
5	4.44	n-Propanol	181556	1.0000	0.8162

Printed on 7/6/2015 2:23:51 PM

AB 7/10/15

15-11-020 petus ~~62~~ 106



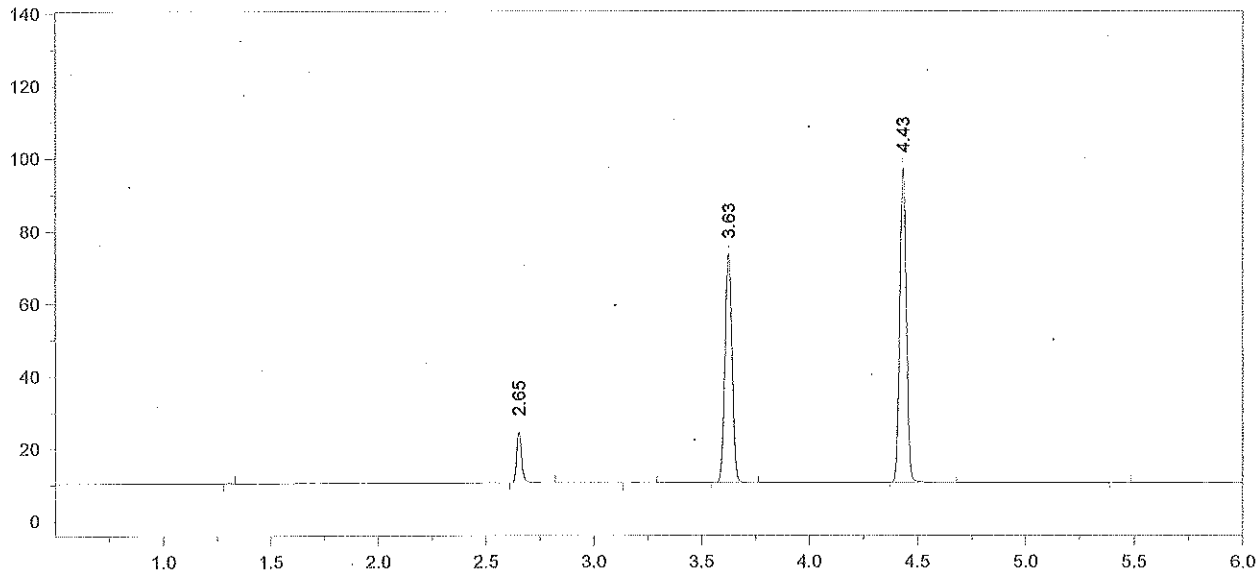
Format File Name = simsolnVFL.met.FMT

Today's Date = 7/6/2015
Today's Time = 2:37:01 PM
Bound File Name = VFL07062015.0015.RAW
Sample Name = .02 DJP
Date Taken = 7/6/2015 2:36:57 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	26941	0.0236	0.0193
4	3.63	t-Butanol	163347	0.9811	0.8007
5	4.44	n-Propanol	216437	1.0000	0.8162

7/10/15
1571-020

Chrom Perfect Chromatogram Report



Format File Name = simsolnVFL.met.FMT

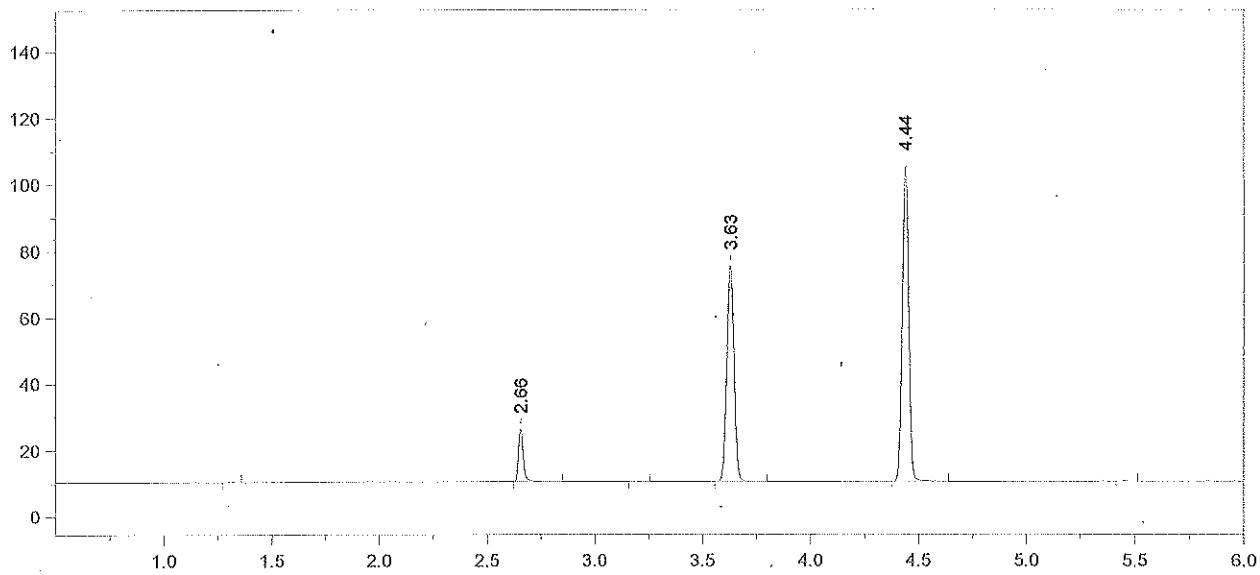
Today's Date = 7/6/2015
Today's Time = 2:55:14 PM
Bound File Name = VFL07062015.0016.RAW
Sample Name = .02 DJP
Date Taken = 7/6/2015 2:55:10 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	22895	0.0235	0.0192
4	3.63	t-Butanol	146316	1.0309	0.8414
5	4.43	n-Propanol	184506	1.0000	0.8162

Printed on 7/6/2015 2:55:15 PM

Page 1 of ~~1~~ ~~64~~ 108

AB 7/10/15 15-11-020 ~~0025-70~~

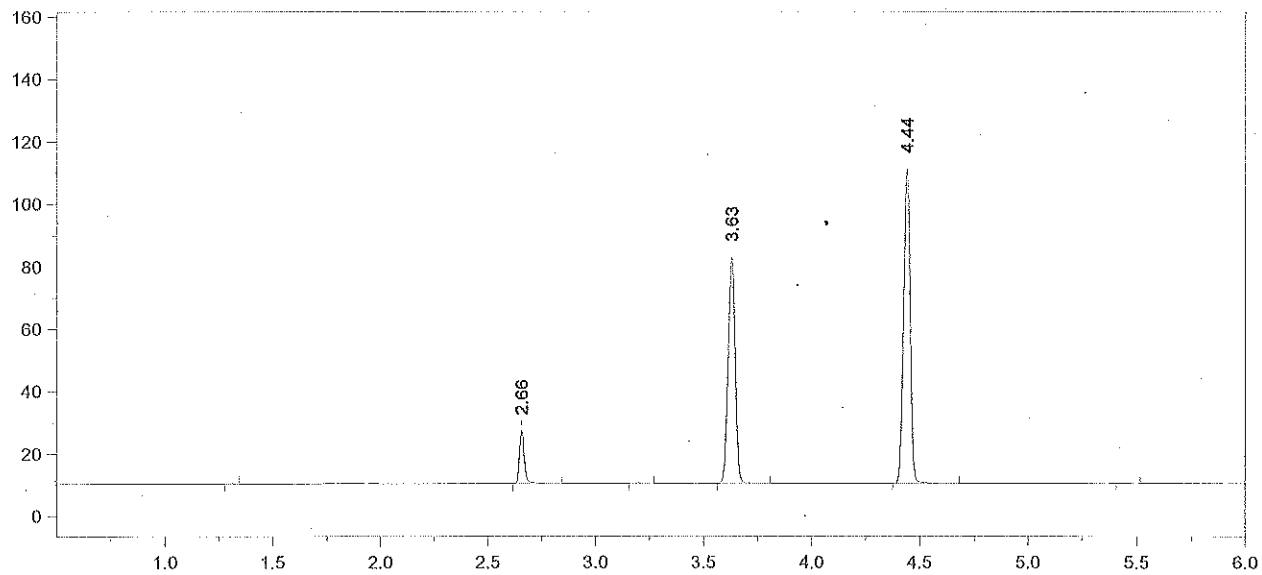


Format File Name = simsolnVFL.met.FMT

Today's Date = 7/6/2015 Today's Time = 3:09:20 PM
Bound File Name = VFL07062015.0017.RAW
Sample Name = .02 DJP
Date Taken = 7/6/2015 3:09:13 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07062015.CAL Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	25449	0.0241	0.0196
4	3.63	t-Butanol	151146	0.9794	0.7994
5	4.44	n-Propanol	200618	1.0000	0.8162

AS 7/10/15 15-11-020 DAW 57 109

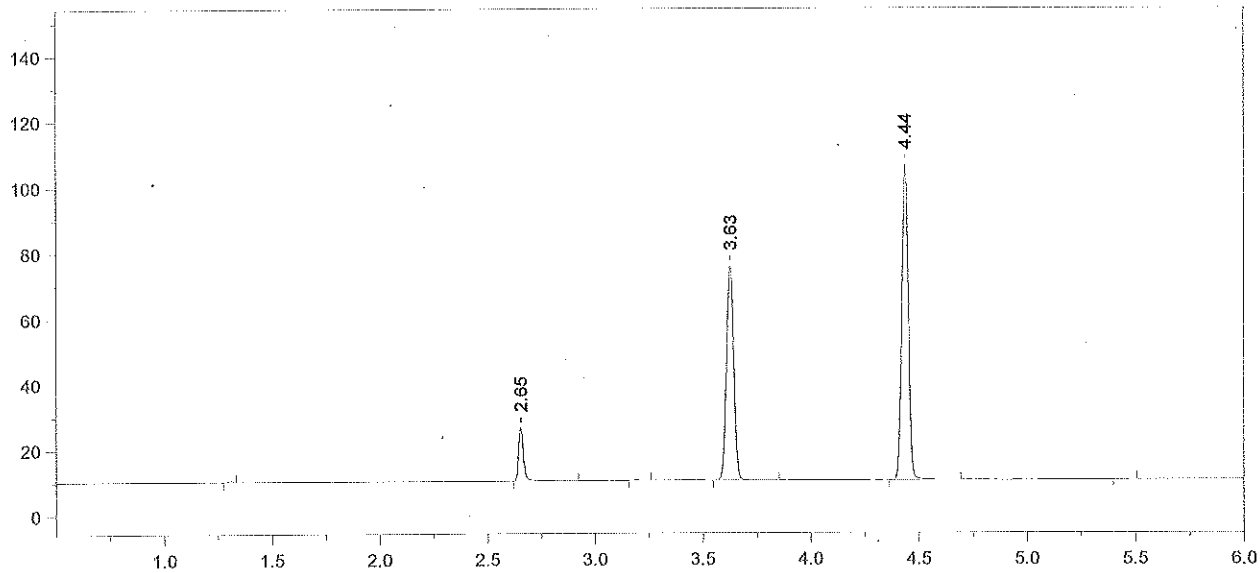


Format File Name = simsolnVFL.met.FMT

Today's Date = 7/6/2015
Today's Time = 3:25:01 PM
Bound File Name = VFL07062015.0018.RAW
Sample Name = .02 DJP
Date Taken = 7/6/2015 3:24:52 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	27077	0.0239	0.0195
4	3.63	t-Butanol	168006	1.0164	0.8296
5	4.44	n-Propanol	214872	1.0000	0.8162

AS 7/10/15
15-11-020 AMC 72

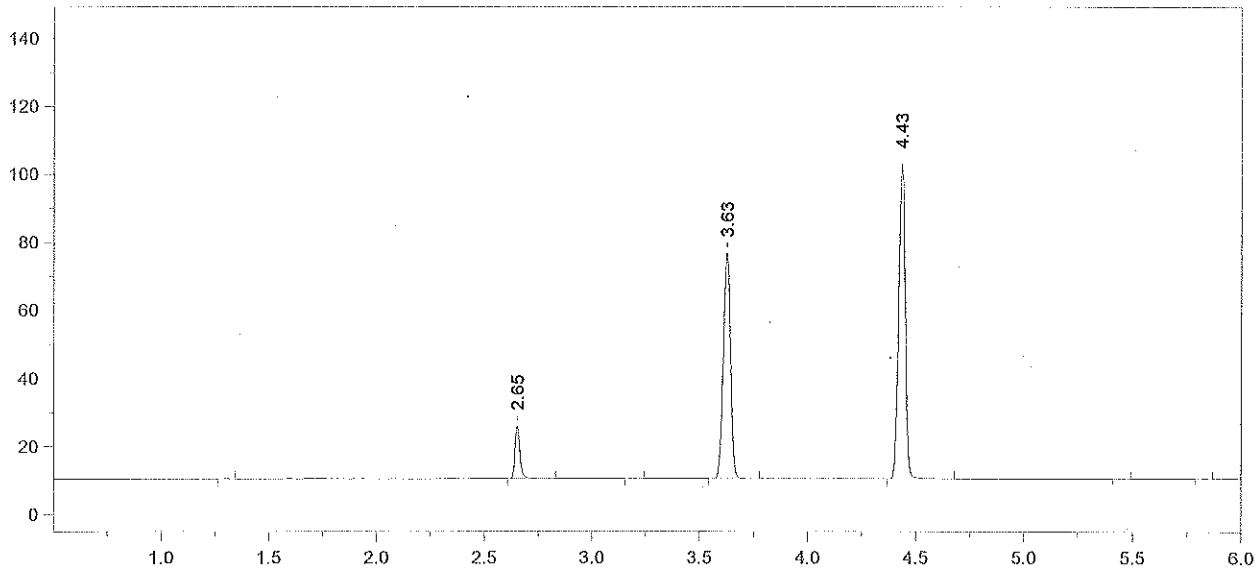


Format File Name = simsolnVFL.met.FMT

Today's Date = 7/6/2015
Today's Time = 3:41:37 PM
Bound File Name = VFL07062015.0019.RAW
Sample Name = .02 ALB
Date Taken = 7/6/2015 3:41:28 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	26211	0.0245	0.0200
4	3.63	t-Butanol	151452	0.9683	0.7903
5	4.44	n-Propanol	203321	1.0000	0.8162

AB 7/10/15
15-11-020



Format File Name = simsolnVFL.met.FMT

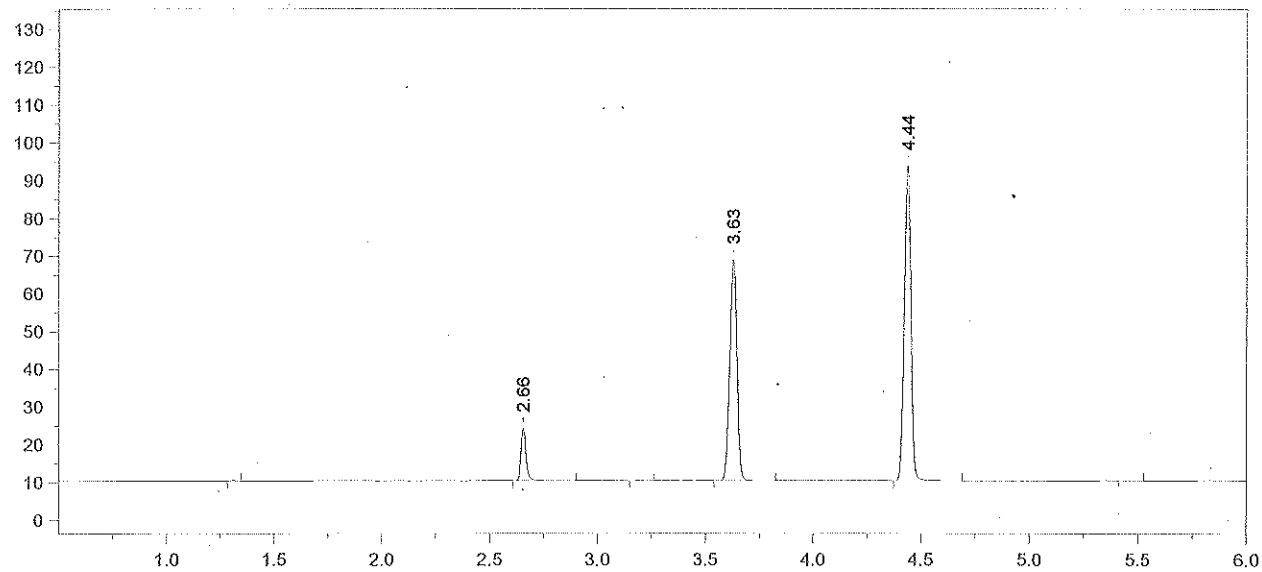
Today's Date = 7/6/2015
Today's Time = 3:56:36 PM
Bound File Name = VFL07062015.0020.RAW
Sample Name = .02 ALB
Date Taken = 7/6/2015 3:56:26 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	24837	0.0239	0.0195
4	3.63	t-Butanol	153670	1.0114	0.8255
5	4.43	n-Propanol	197503	1.0000	0.8162

AB 7/10/15

15-11-020

112



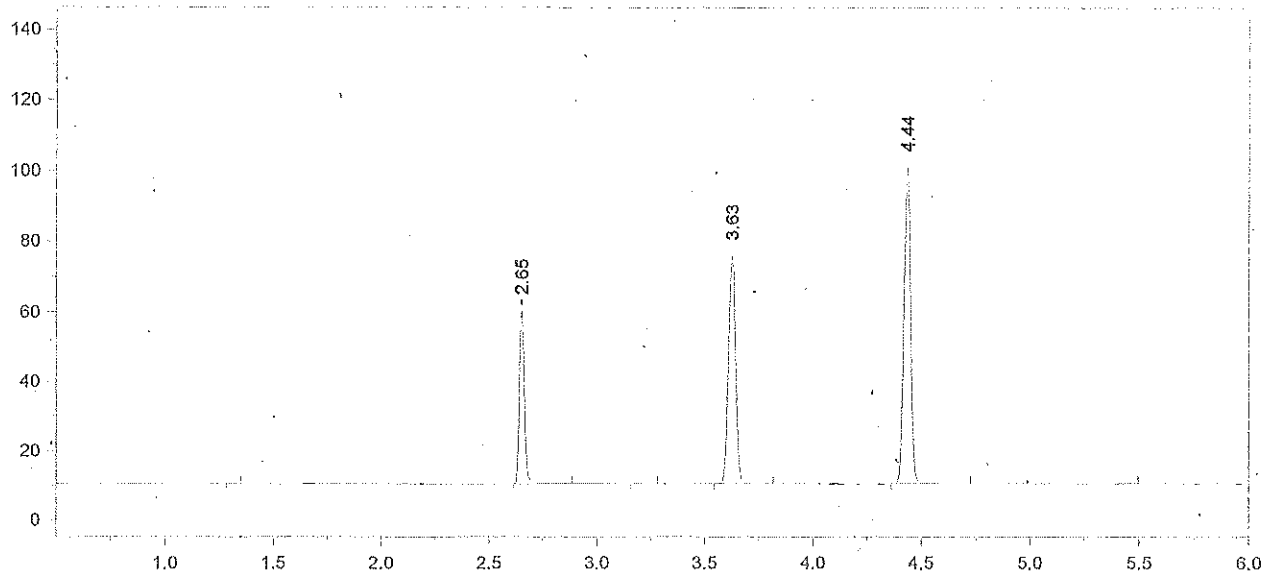
Format File Name = simsolnVFL.met.FMT

Today's Date = 7/6/2015 Today's Time = 4:11:52 PM
Bound File Name = VFL07062015.0021.RAW
Sample Name = .02 ALB
Date Taken = 7/6/2015 4:11:47 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07062015.CAL Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	22729	0.0242	0.0198
4	3.63	t-Butanol	136280	0.9953	0.8124
5	4.44	n-Propanol	177989	1.0000	0.8162

AB 7/10/15

07/10/15
113
19 11-0ro



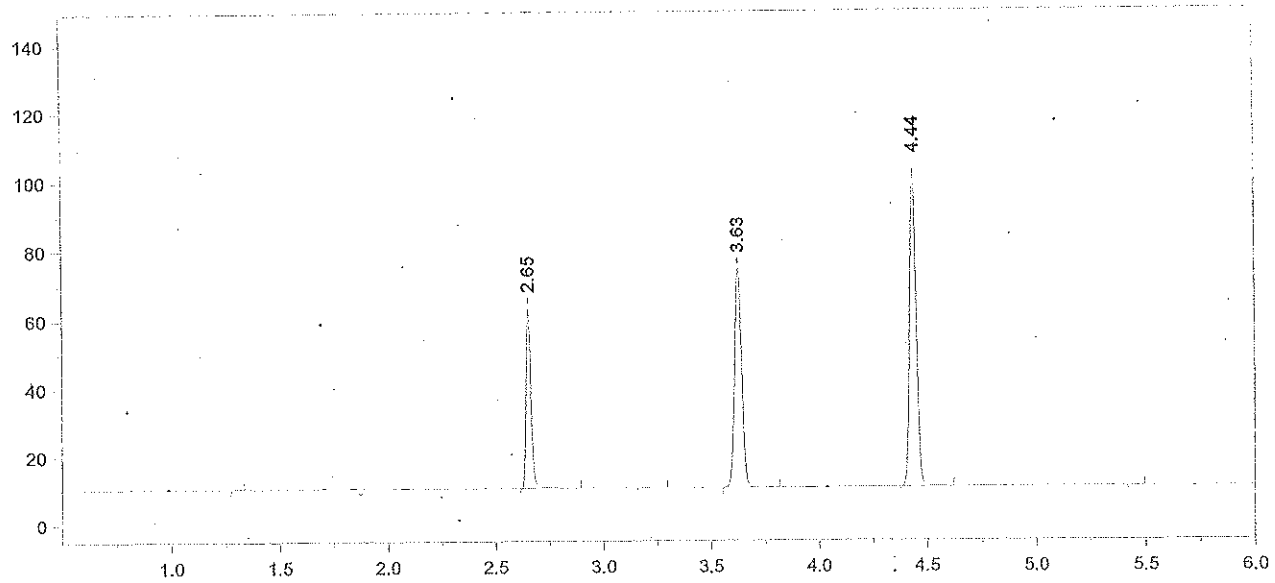
Format File Name = AlcoholVFL.FMT

Today's Date = 7/6/2015
Today's Time = 4:27:55 PM
Bound File Name = VFL07062015.0022.RAW
Sample Name = CCS
Date Taken = 7/6/2015 4:27:51 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	78212	0.0767
4	3.63	t-Butanol	151763	1.0204
5	4.44	n-Propanol	193334	1.0000

AB 7/10/15

15-11-020 ~~PAGE 60~~ 114 ~~70~~



Format File Name = AlcoholVFL.FMT

Today's Date = 7/6/2015
Today's Time = 4:43:15 PM
Bound File Name = VFL07062015.0023.RAW
Sample Name = CCS
Date Taken = 7/6/2015 4:43:09 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	82308	0.0798
4	3.63	t-Butanol	148051	0.9837
5	4.44	n-Propanol	195652	1.0000

CCS mean : 0.0782 % ethanol

±5% : 0.0743 - 0.0821

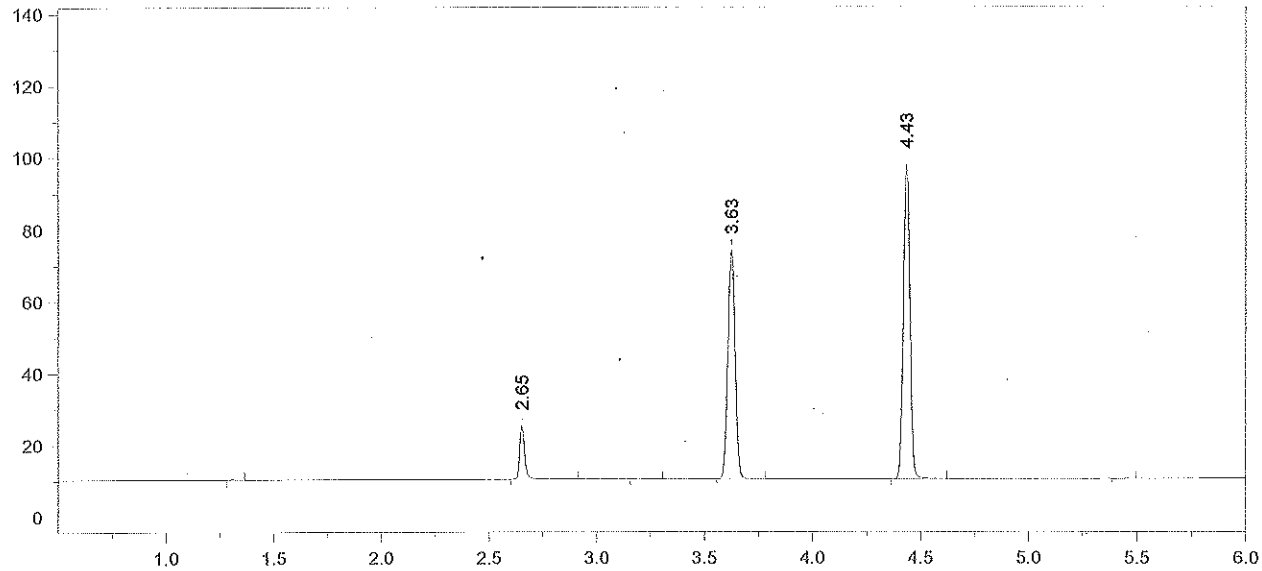
Recovery : $\frac{0.078}{0.08}$ = 97.5%

DG 7/8/15

DG 7/10/15
115
~~71~~

AB 7/10/15
15-11-020 DG 7/8/15

Chrom Perfect Chromatogram Report



Format File Name = simsolnVFL.met.FMT

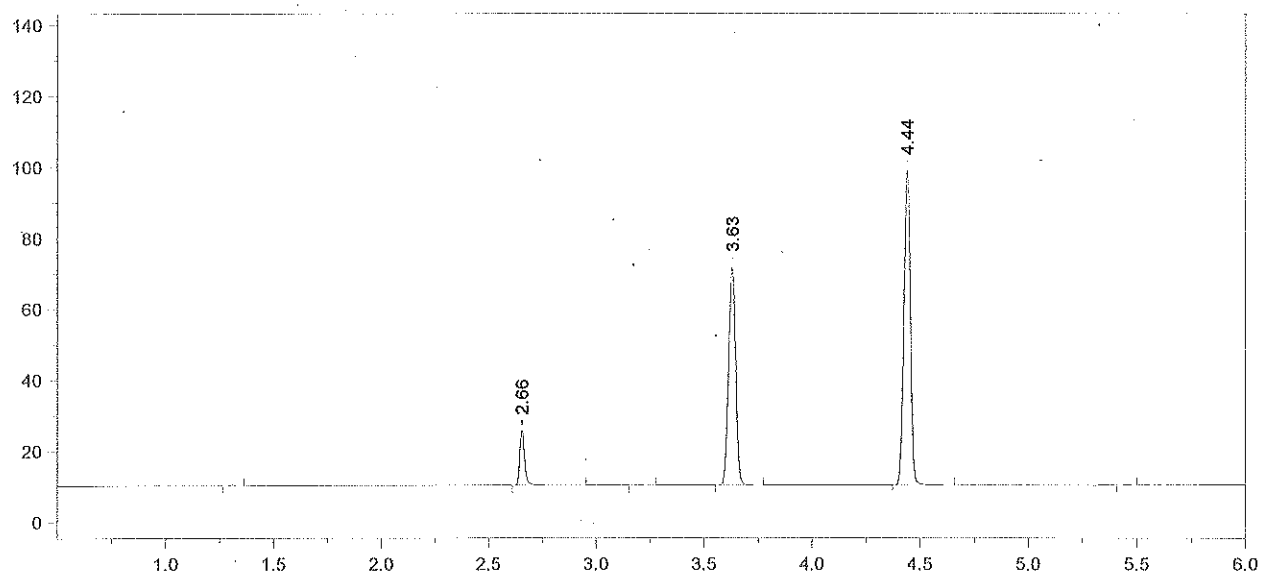
Today's Date = 7/6/2015
Today's Time = 4:59:26 PM
Bound File Name = VFL07062015.0024.RAW
Sample Name = .02 ALB
Date Taken = 7/6/2015 4:59:17 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	24006	0.0243	0.0199
4	3.63	t-Butanol	147604	1.0256	0.8371
5	4.43	n-Propanol	187083	1.0000	0.8162

116

AB 7/10/15

15-11-020 ~~75~~



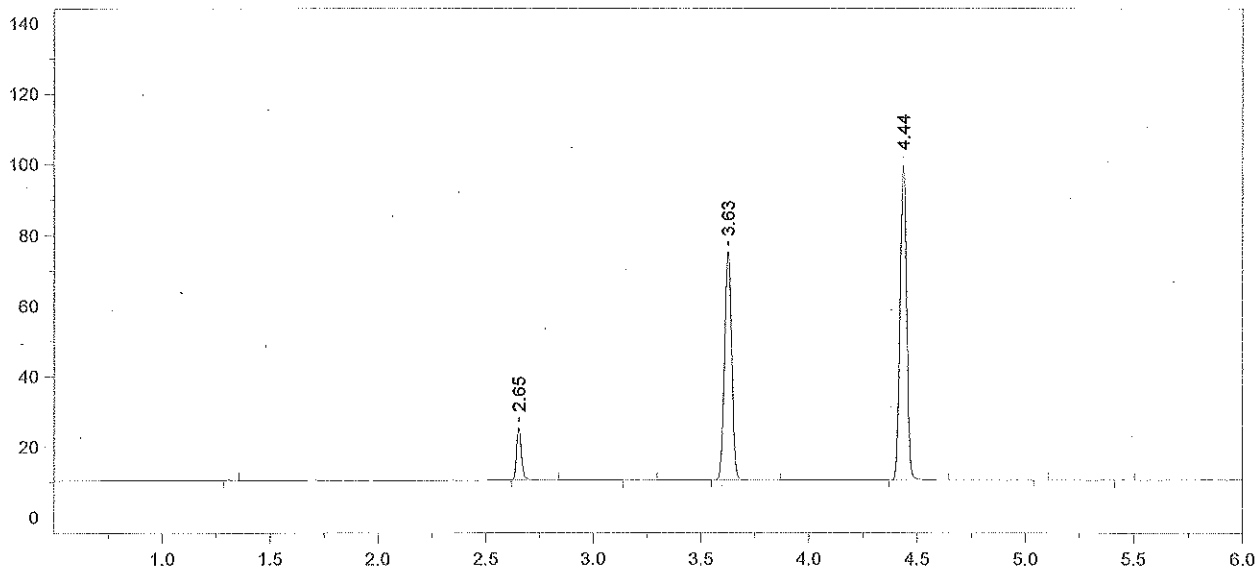
Format File Name = simsolnVFL.met.FMT

Today's Date = 7/6/2015 Today's Time = 5:13:17 PM
Bound File Name = VFL07062015.0025.RAW
Sample Name = .02 ALB
Date Taken = 7/6/2015 5:13:13 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07062015.CAL Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	25057	0.0252	0.0206
4	3.63	t-Butanol	141986	0.9783	0.7985
5	4.44	n-Propanol	188672	1.0000	0.8162

7/10/15
117

AB 7/10/15
15-11-020 ~~77~~



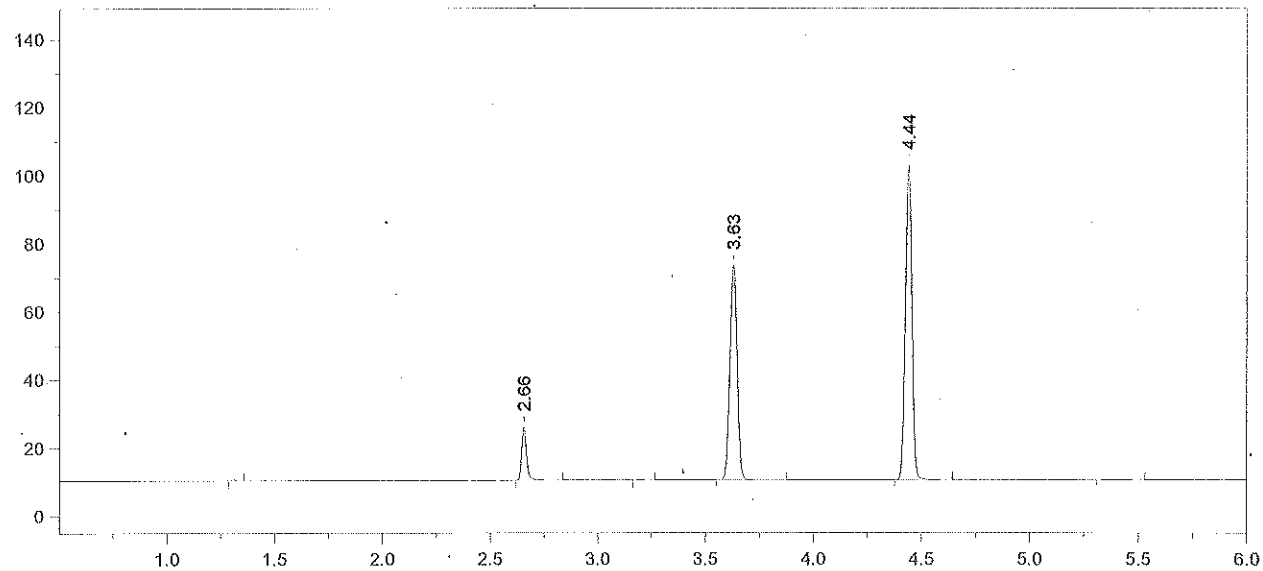
Format File Name = simsolnVFL.met.FMT

Today's Date = 7/6/2015 Today's Time = 5:30:49 PM
Bound File Name = VFL07062015.0026.RAW
Sample Name = .02 ALB
Date Taken = 7/6/2015 5:30:42 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07062015.CAL Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	23836	0.0238	0.0194
4	3.63	t-Butanol	150062	1.0274	0.8385
5	4.44	n-Propanol	189870	1.0000	0.8162

8/7/15
118

AS 7/10/15 15-11-020 page ~~78~~ 81
DC 8/7/15



Format File Name = simsolnVFL.met.FMT

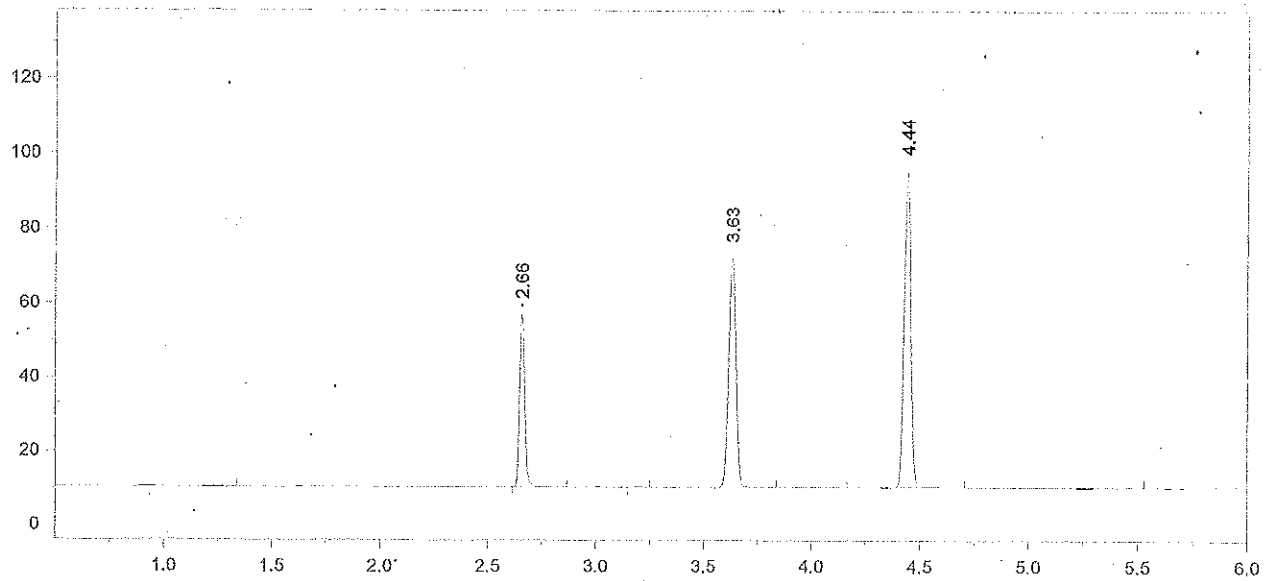
Today's Date = 7/6/2015
Today's Time = 5:44:48 PM
Bound File Name = VFL07062015.0027.RAW
Sample Name = .02 ALB
Date Taken = 7/6/2015 5:44:40 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	24994	0.0242	0.0197
4	3.63	t-Butanol	146528	0.9716	0.7930
5	4.44	n-Propanol	196043	1.0000	0.8162

p. 119

AB 7/10/15

15-11-020



Format File Name = AlcoholVFL.FMT

Today's Date = 7/6/2015
Today's Time = 7:36:32 PM
Bound File Name = VFL07062015.0034.RAW
Sample Name = CCS
Date Taken = 7/6/2015 7:36:24 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07062015.CAL
Calibration Version = 7

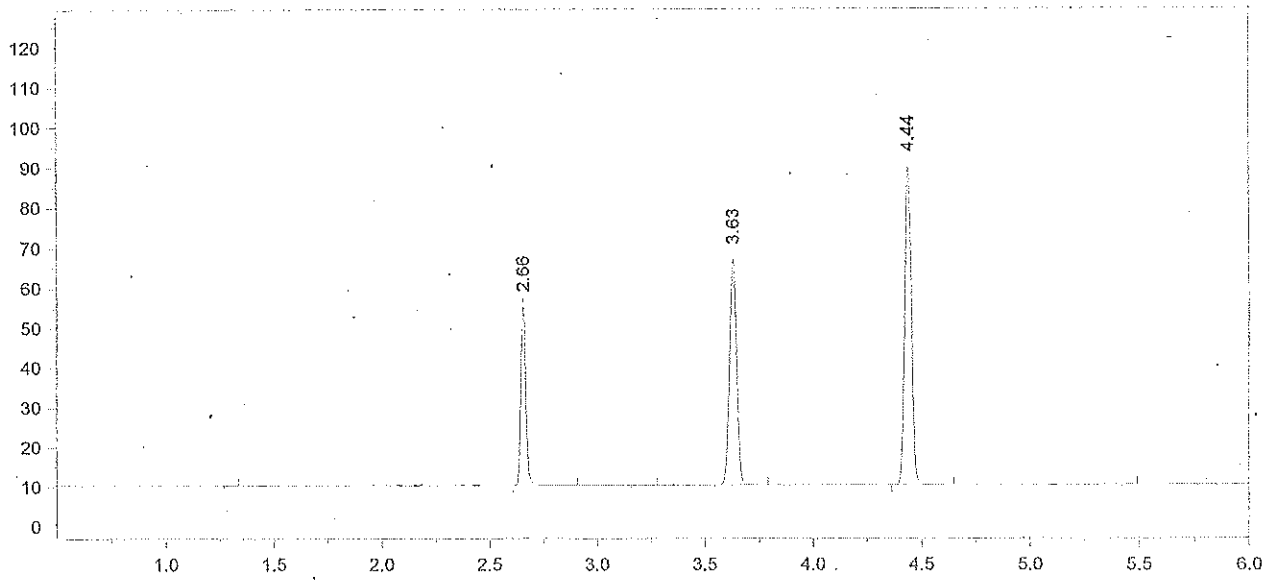
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	72827	0.0764
4	3.63	t-Butanol	144274	1.0378
5	4.44	n-Propanol	180715	1.0000

AB 7/10/15

07/8/15 ~~150~~ 76

15-11-20 Atus 62

07/10/15 120



Format File Name = AlcoholVFL.FMT

Today's Date = 7/6/2015
Today's Time = 7:51:25 PM
Bound File Name = VFL07062015.0035.RAW
Sample Name = CCS
Date Taken = 7/6/2015 7:51:18 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	70812	0.0792
4	3.63	t-Butanol	130828	1.0034
5	4.44	n-Propanol	169498	1.0000

CCS mean : 0.0778

±5% : 0.0739 – 0.0817

Recovery: $\frac{0.078}{0.08}$ = 97.5%

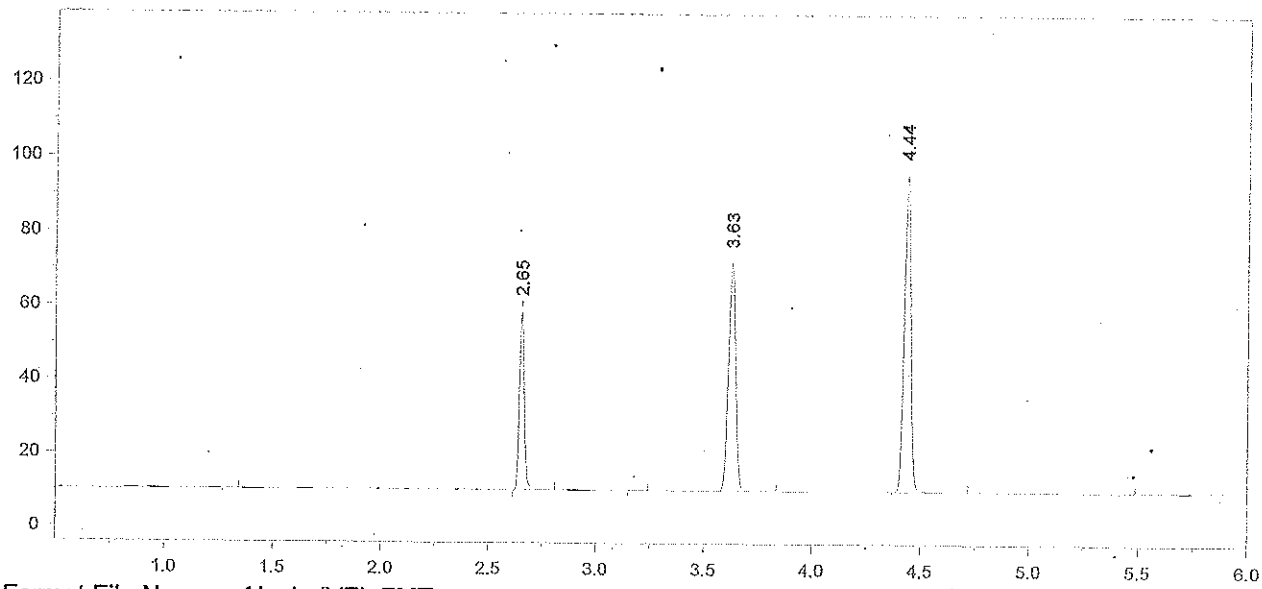
8g 7/8/15

dg 7/10/15 121

AB 7/10/15

15-11-020 Abus 63

77



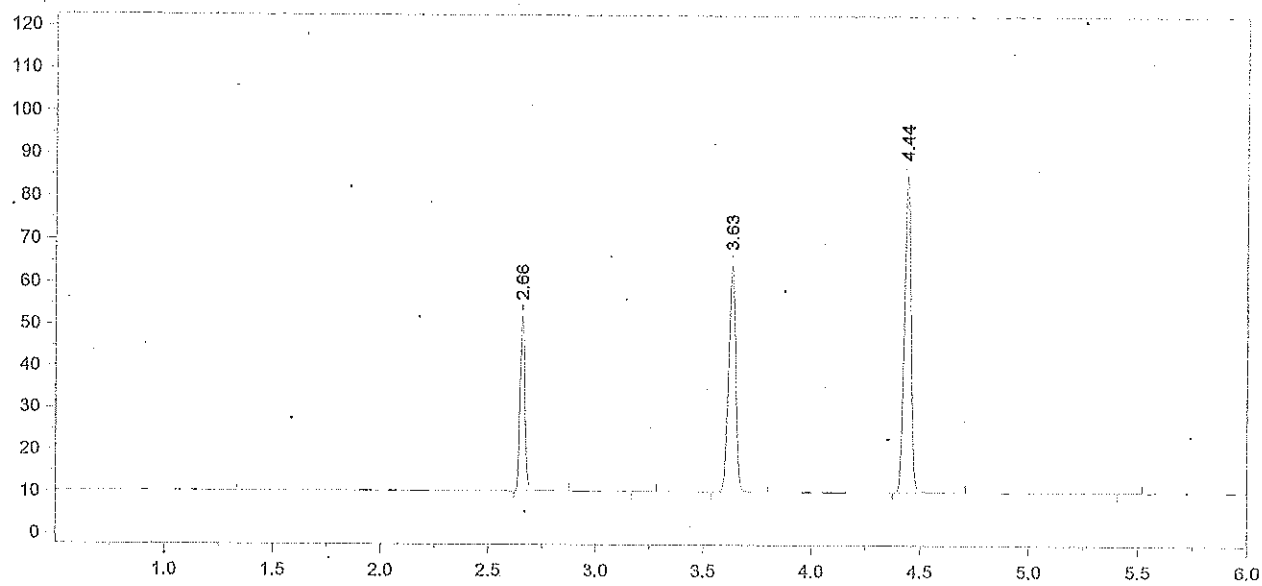
Format File Name = AlcoholVFL.FMT

Today's Date = 7/6/2015
Today's Time = 10:11:58 PM
Bound File Name = VFL07062015.0044.RAW
Sample Name = CCS
Date Taken = 7/6/2015 10:11:48 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	74827	0.0779
4	3.63	t-Butanol	142756	1.0180
5	4.44	n-Propanol	182281	1.0000

AB 7/10/15 15-1-020

Chrom Perfect Chromatogram Report



Format File Name = AlcoholVFL.FMT

Today's Date = 7/6/2015
Today's Time = 10:27:19 PM
Bound File Name = VFL07062015.0045.RAW
Sample Name = CCS
Date Taken = 7/6/2015 10:27:14 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	65323	0.0777
4	3.63	t-Butanol	124462	1.0145
5	4.44	n-Propanol	159481	1.0000

CCS MEAN : 0.0778 % ETHANOL

±5% . 0.0739 - 0.0817

RECOVERY : $\frac{0.078}{0.08}$ = 97.5%

7/8/15

123

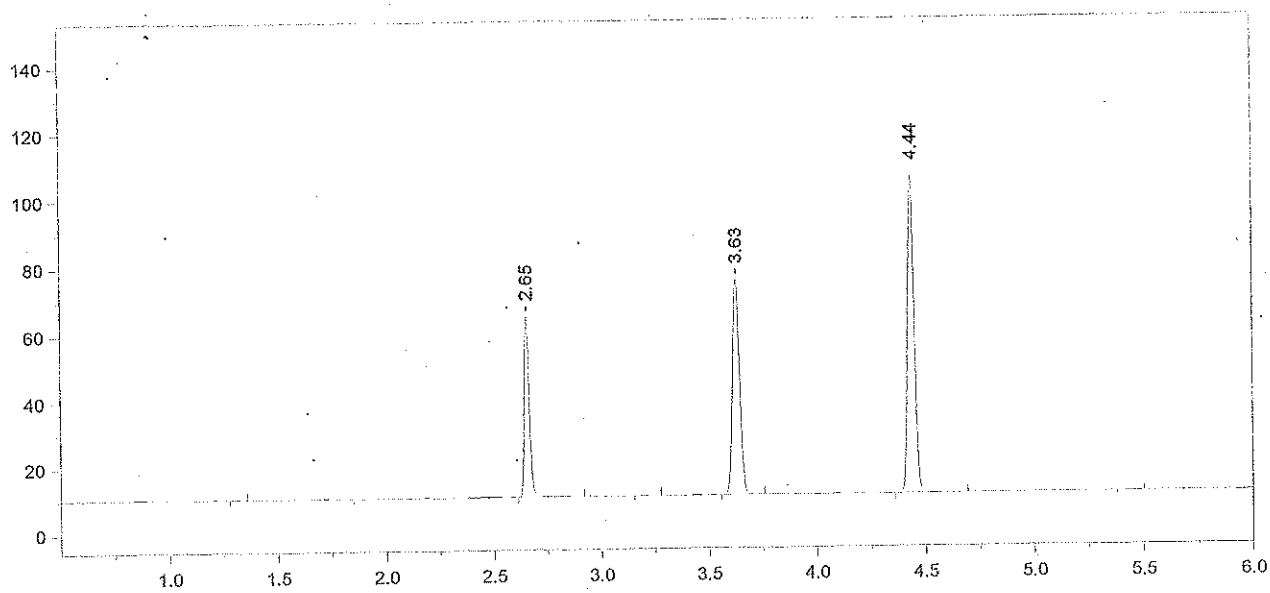
7/10/15 OF 123

Printed on 7/6/2015 10:27:20 PM

Page 1 of 1 79

7/10/15

15-11-020 DATE 7/10/15 OF 79



Format File Name = AlcoholVFL.FMT

Today's Date = 7/7/2015
Today's Time = 10:16:11 AM
Bound File Name = VFL07062015.0046.RAW
Sample Name = CCS
Date Taken = 7/7/2015 10:16:06 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	85346	0.0799
4	3.63	t-Butanol	149196	0.9570
5	4.44	n-Propanol	202650	1.0000

CCS MEAN: 0.0787 % ETHANOL

±5%: 0.0747 – 0.0826

DJZ 7/8/15

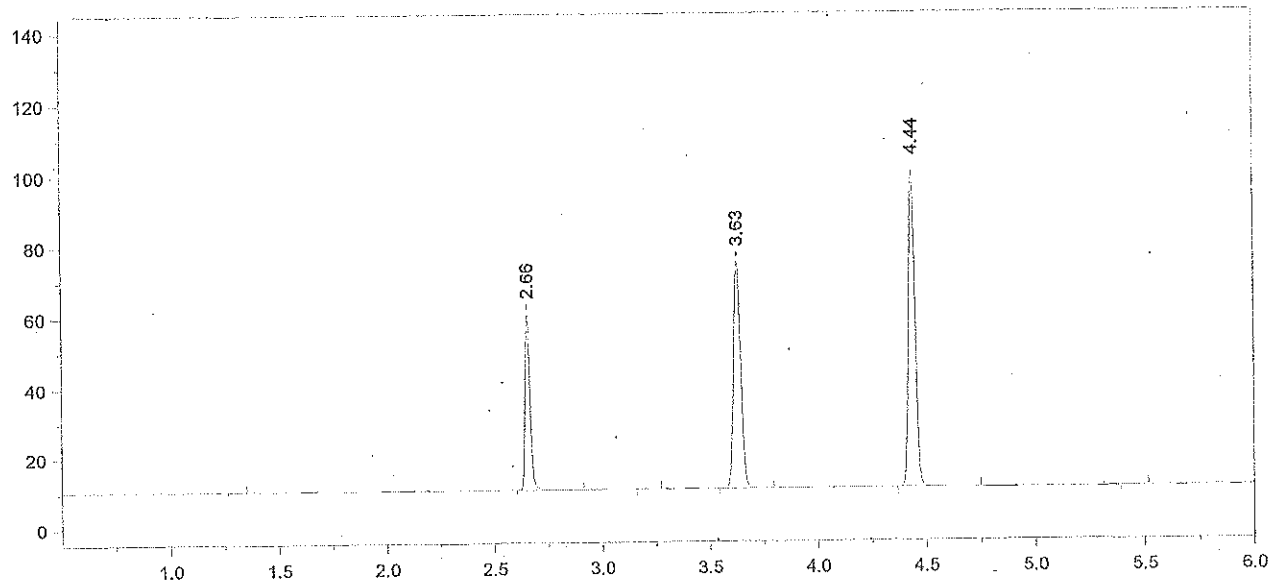
Recovery: $\frac{0.079}{0.08}$ = 98.7%

15-11-020
p. 124

DJZ 7/8/15

DJZ 7/8/15

~~110~~ 23 7/10/15



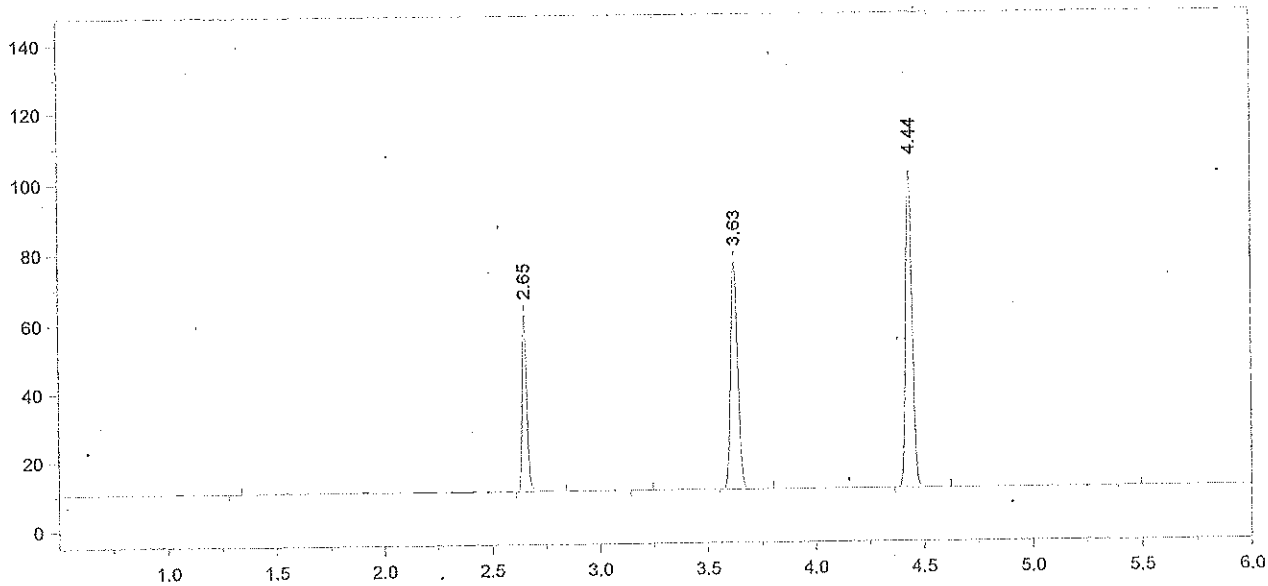
Format File Name = AlcoholVFL.FMT

Today's Date = 7/7/2015
Today's Time = 10:33:22 AM
Bound File Name = VFL07062015.0047.RAW
Sample Name = CCS
Date Taken = 7/7/2015 10:33:12 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	78226	0.0776
4	3.63	t-Butanol	148946	1.0126
5	4.44	n-Propanol	191201	1.0000

15-11-020
0.125
AB 7/15/15

7/10/15
7/10/15
AB



Format File Name = AlcoholVFL.FMT

Today's Date = 7/7/2015
Today's Time = 12:37:15 PM
Bound File Name = VFL07062015.0055.RAW
Sample Name = CCS
Date Taken = 7/7/2015 12:37:10 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	79638	0.0776
4	3.63	t-Butanol	152192	1.0160
5	4.44	n-Propanol	194726	1.0000

CCS MEAN: 0.0779% ETHANOL

±5%: 0.0740 - 0.0818

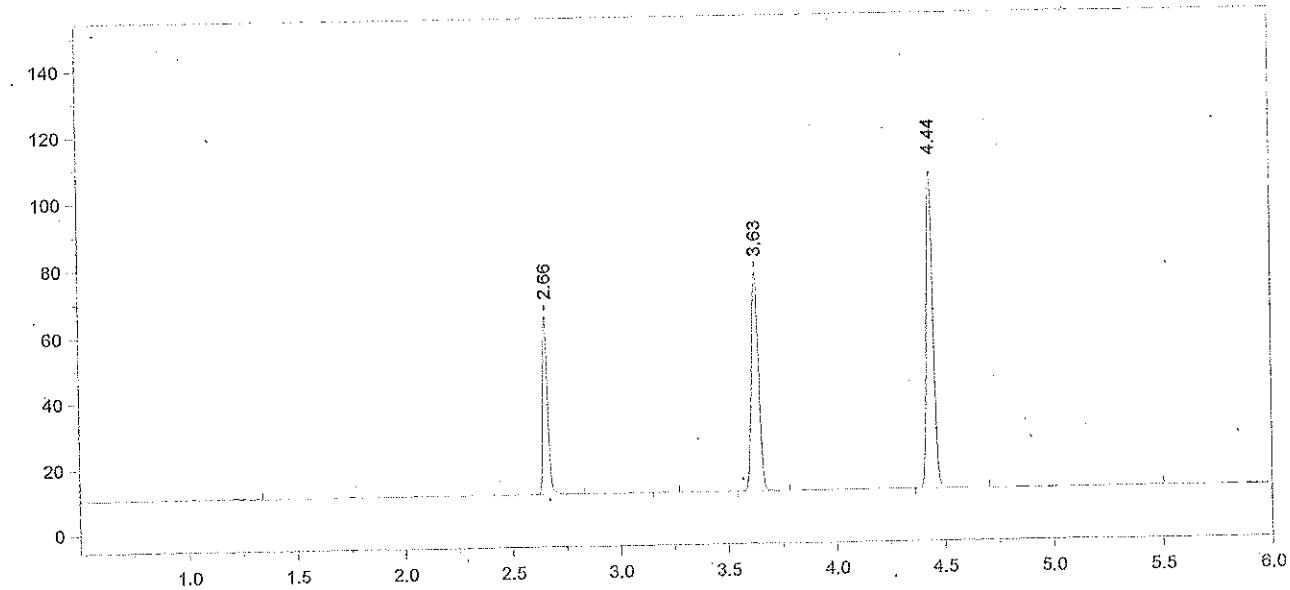
Recovery: $\frac{0.078}{0.08}$ = 97.5%

7/8/15

15-11-020
p. 126

7/15/15

7/10/15



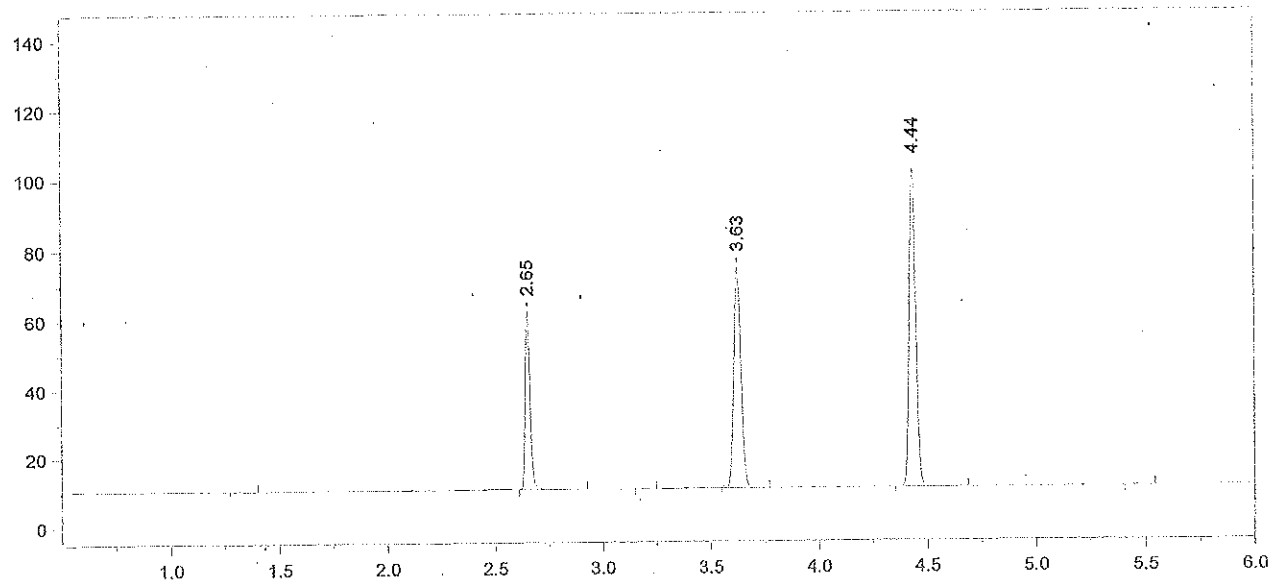
Format File Name = AlcoholVFL.FMT

Today's Date = 7/7/2015
Today's Time = 12:51:48 PM
Bound File Name = VFL07062015.0056.RAW
Sample Name = CCS
Date Taken = 7/7/2015 12:51:43 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	84205	0.0783
4	3.63	t-Butanol	153463	0.9781
5	4.44	n-Propanol	203960	1.0000

15-11-020
AS 7/15/15 0/27

~~8/7/15~~ ~~120~~ AS 7/10/15



Format File Name = AlcoholVFL.FMT

Today's Date = 7/7/2015
Today's Time = 2:55:30 PM
Bound File Name = VFL07062015.0064.RAW
Sample Name = CCS
Date Taken = 7/7/2015 2:55:25 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	81094	0.0787
4	3.63	t-Butanol	147406	0.9800
5	4.44	n-Propanol	195522	1.0000

CCS NOM.: 0.0779% ETHANOL

±5% : 0.0740 – 0.0818

Recovery : $\frac{0.078}{0.08}$ = 97.5%

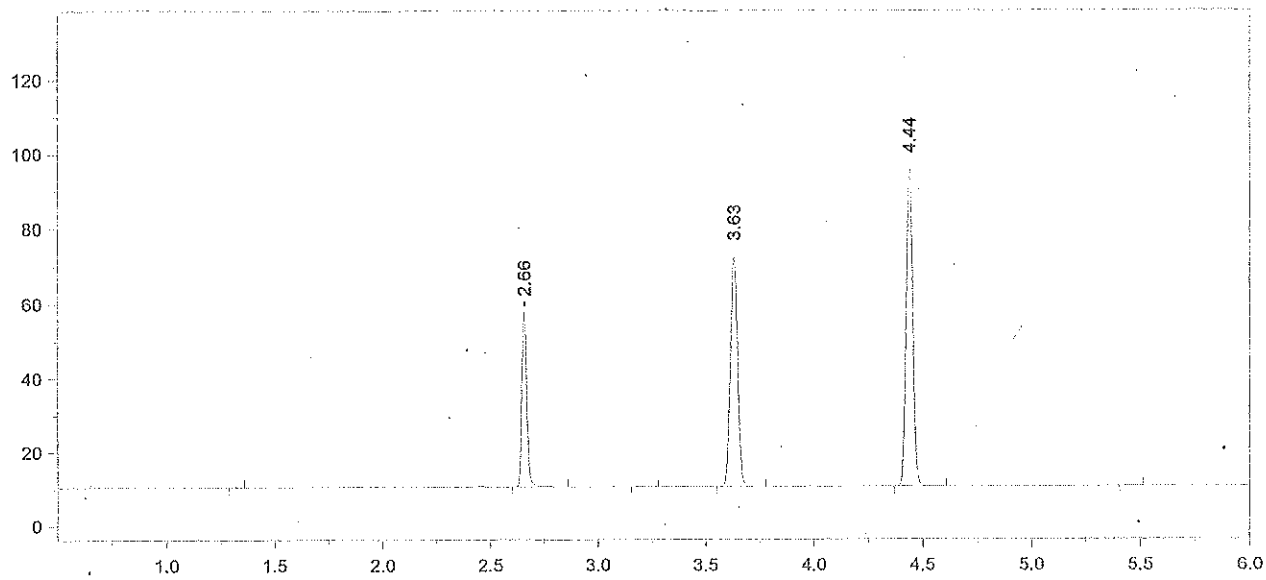
7/8/15

15-11-020
p. 128

AB 7/15/15

~~7/10/15 128~~

AB 7/10/15



Format File Name = AlcoholVFL.FMT

Today's Date = 7/7/2015
Today's Time = 3:11:10 PM
Bound File Name = VFL07062015.0065.RAW
Sample Name = CCS
Date Taken = 7/7/2015 3:11:06 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL07062015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	73574	0.0771
4	3.63	t-Butanol	143825	1.0331
5	4.44	n-Propanol	180968	1.0000

15-11-020
p.129
07/10/15
p.129 oe
AB 7/15/15

07/10/15 129 AB 7/10/15