VERMONT FORENSIC LABORATORY

SIMULATOR SOLUTION REVIEW CHECKLIST

SOLUTION TYPE AND VOLUME: 0.100 EXTERNAL STANDARD, 20L

LOT NUMBER#: 15-25-100 **ANALYST:** DS

TECHNICAL REVIEWER: RM **DATE:** 12/14/15

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

Comments:

ADMINISTRATIVE REVIEWER: AB **DATE:** 12/15/15

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

Comments:

Check Mark or X = pass, NA= Not Applicable

VERMONT FORENSIC LABORATORY

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PO BOX 47
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FAX: 802-241-5557
http://vfl.vermont.gov

Certificate of Analysis of DataMaster External Standard Solution

On 11/30/2015, an ethanol solution was prepared by ~~Amanda Bolduc~~ Jeffery Dunette 12/14/15 for use as a DataMaster External Standard solution. The solution was prepared per standard laboratory practice and assigned the lot number 15-25-100 and an expiration date of 11/30/2016.

On 12/01/2015 and 12/02/2015, the solution was analyzed against calibration VFL12012015.cal and VFL12022015.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 0.100 g/210L simulated breath ethanol concentration and approved for use as a DataMaster External Standard solution.

Dated at Waterbury, Vermont this 17th day of December, 2015.

~~Amanda Bolduc~~
Dano Patrick
12/14/15

VERMONT FORENSIC LABORATORY
Simulator Solution Worksheet

0.100 External Standard Solution 20L
Lot # 15-25-100
Prepared 11/30/2015 by JSD
Exp 11/30/2016

DJP Cal VFL12012015.cal
JSD/DJP Vials
Analyzed on 12/01/2015

0.0988 DJP	
0.1007	
0.0995	
0.1012	
0.0991	
0.1015	
0.0993	
0.0992 JSD	
0.0997	
0.1012	
0.0993	
0.1012	
0.1005	
0.0998	

Ave. =	0.1001
Std Dev. =	0.0009
Min. =	0.0988
Max. =	0.1015

AQ QC Manf.	Cerilliant
AQ QC Lot #	FN09051304
Cal Std A Lot #	FN01131401
Cal Std B Lot #	FN08101401
Cal Std C Lot #	FN05211402
Cal Std D Lot #	FN12011401
Cal Std E Lot #	FN11191402
Int Std Lot #	IS-09292015
TMX Lot #	TMX-08142015
Blank Lot#	BL-01162015

DJP Cal VFL12022015.cal
JSD/DJP Vials
Analyzed on 12/02/2015

0.0987 DJP	
0.1000	
0.0991	
0.1004	
0.0987	
0.1008	
0.0994	
0.1002 JSD	
0.0984	
0.1005	
0.0991	
0.1018	
0.0992	
0.1003	

Ave. =	0.0998
Std Dev. =	0.0010
Min. =	0.0984
Max. =	0.1018

AQ QC Manf.	Cerilliant
AQ QC Lot #	FN09051304
Cal Std A Lot #	FN01131401
Cal Std B Lot #	FN08101401
Cal Std C Lot #	FN05211402
Cal Std D Lot #	FN12011401
Cal Std E Lot #	FN11191402
Int Std Lot #	IS-09292015
TMX Lot #	TMX-08142015
Blank Lot#	BL-01162015

DJ 12/4/15

Total Values from Both Runs

Average	Mean
0.0988	0.0984
0.1007	0.0987
0.0995	
0.1012	0.0988
0.0991	0.0991
0.1015	
0.0993	
0.0992	0.0992
0.0997	
0.1012	0.0993
0.0993	
0.1012	0.0994
0.1005	0.0995
0.0998	0.0997
0.0994	0.0998
0.1008	0.1000
0.0987	0.1002
0.1004	0.1003
0.0991	0.1004
0.1000	0.1005
0.0987	
0.1003	0.1007
0.0992	0.1008
0.1018	0.1012
0.0991	
0.1005	
0.0984	0.1015
0.1002	0.1018

Ave. =	0.0999
Avg Std Dev. =	0.0009
Mean =	0.1000
Mean Std Dev. =	0.0009
Min. =	0.0984
Max =	0.1018
RPD =	3.40%

File Name = C:\Alcohol Data\VFL12012015\VFL12012015.SEQ
Version = 2
File Date = 12/1/2015 9:18:36 AM

Entry #	Raw File Name	Method File Name	Sample Name	Sample Wt.	Int. Std. Amount
1	VFL12012015.0001.raw	Blood Alc temp VFL.MET	BLANK	1.00	1.00
2	VFL12012015.0002.raw	Blood Alc temp VFL.MET	TMX	1.00	1.00
3	VFL12012015.0003.raw	Blood Alc temp VFL.MET	STD A	1.00	1.00
4	VFL12012015.0004.raw	Blood Alc temp VFL.MET	STD B	1.00	1.00
5	VFL12012015.0005.raw	Blood Alc temp VFL.MET	STD C	1.00	1.00
6	VFL12012015.0006.raw	Blood Alc temp VFL.MET	STD D	1.00	1.00
7	VFL12012015.0007.raw	Blood Alc temp VFL.MET	STD E	1.00	1.00
8	VFL12012015.0008.raw	Blood Alc temp VFL.MET	AQ	1.00	1.00
9	VFL12012015.0009.raw	Blood Alc temp VFL.MET	AQ	1.00	1.00
10	VFL12012015.0010.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
11	VFL12012015.0011.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
12	VFL12012015.0012.raw	simsoln.met	100 DP	1.00	1.00
13	VFL12012015.0013.raw	simsoln.met	100 DP	1.00	1.00
14	VFL12012015.0014.raw	simsoln.met	100 DP	1.00	1.00
15	VFL12012015.0015.raw	simsoln.met	100 DP	1.00	1.00
16	VFL12012015.0016.raw	simsoln.met	100 DP	1.00	1.00
17	VFL12012015.0017.raw	simsoln.met	100 DP	1.00	1.00
18	VFL12012015.0018.raw	simsoln.met	100 DP	1.00	1.00
19	VFL12012015.0019.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
20	VFL12012015.0020.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
21	VFL12012015.0021.raw	simsoln.met	100 JD	1.00	1.00
22	VFL12012015.0022.raw	simsoln.met	100 JD	1.00	1.00
23	VFL12012015.0023.raw	simsoln.met	100 JD	1.00	1.00
24	VFL12012015.0024.raw	simsoln.met	100 JD	1.00	1.00
25	VFL12012015.0025.raw	simsoln.met	100 JD	1.00	1.00
26	VFL12012015.0026.raw	simsoln.met	100 JD	1.00	1.00
27	VFL12012015.0027.raw	simsoln.met	100 JD	1.00	1.00
28	VFL12012015.0028.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
29	VFL12012015.0029.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00

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File Name: C:\Methods\VFL12012015.CAL
Version: 7

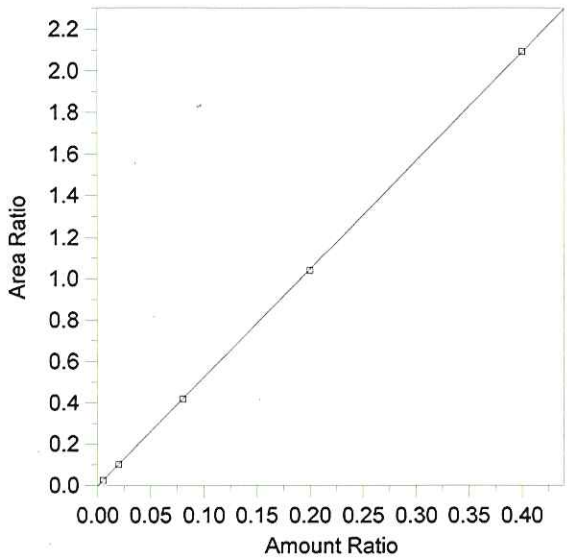
Creator:
Description:
Reason for change:

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:	2.652 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 = 5.225948 X + 0

Linear fit with equal weighting, forced to origin

Coefficient of determination:	0.9999826
Average error:	1.108%
Average CF:	5.232421
RSD:	1.725%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source	Date and time
1	(0.078)	(85146)	--	--	0.078	85146	Manual	8/18/2015 8:39:13 AM
2	0.005	4857.878	971575.6	2.926	0.005	2.689441E-02	C:\Alcohol Data\VFL12012015\VFL12012015.0003.BND	12/1/2015 10:28:01 AM
3	0.02	18932.6	946630	-1.752	0.02	0.1026879	C:\Alcohol Data\VFL12012015\VFL12012015.0004.BND	12/1/2015 10:45:16 AM
4	0.08	76884.27	961053.4	-0.130	0.08	0.4175323	C:\Alcohol Data\VFL12012015\VFL12012015.0005.BND	12/1/2015 10:59:11 AM
5	0.2	214095.7	1070479	-0.579	0.2	1.039137	C:\Alcohol Data\VFL12012015\VFL12012015.0006.BND	12/1/2015 11:14:59 AM
6	0.4	451886	1129715	0.154	0.4	2.093596	C:\Alcohol Data\VFL12012015\VFL12012015.0007.BND	12/1/2015 11:29:52 AM

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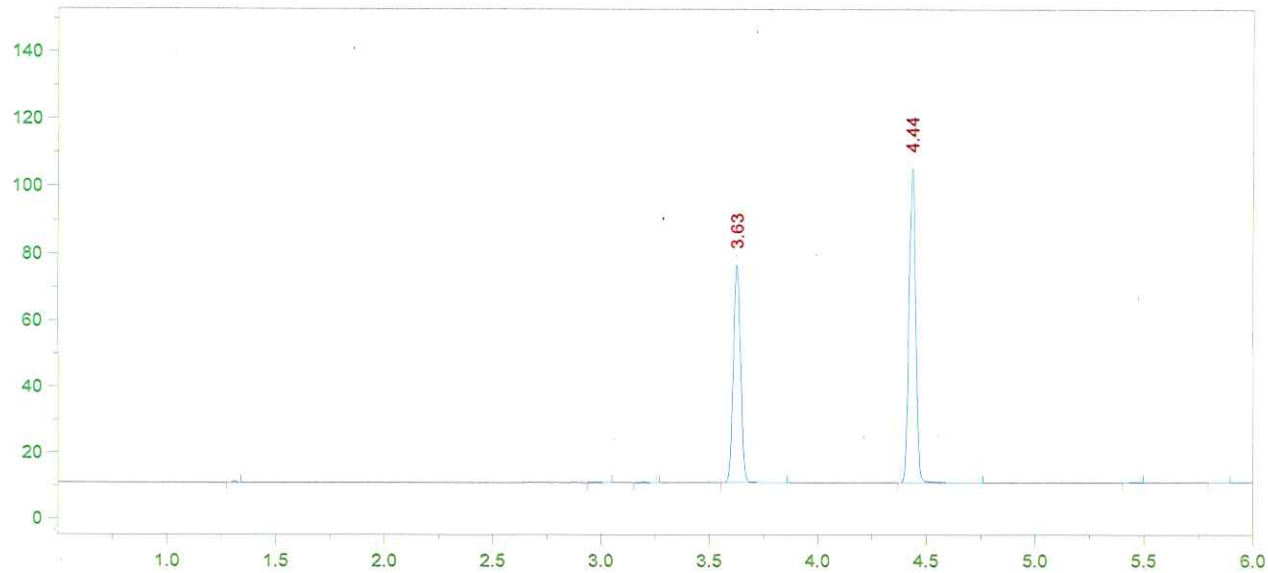
DO

23



Format File Name = AlcoholVFL.FMT

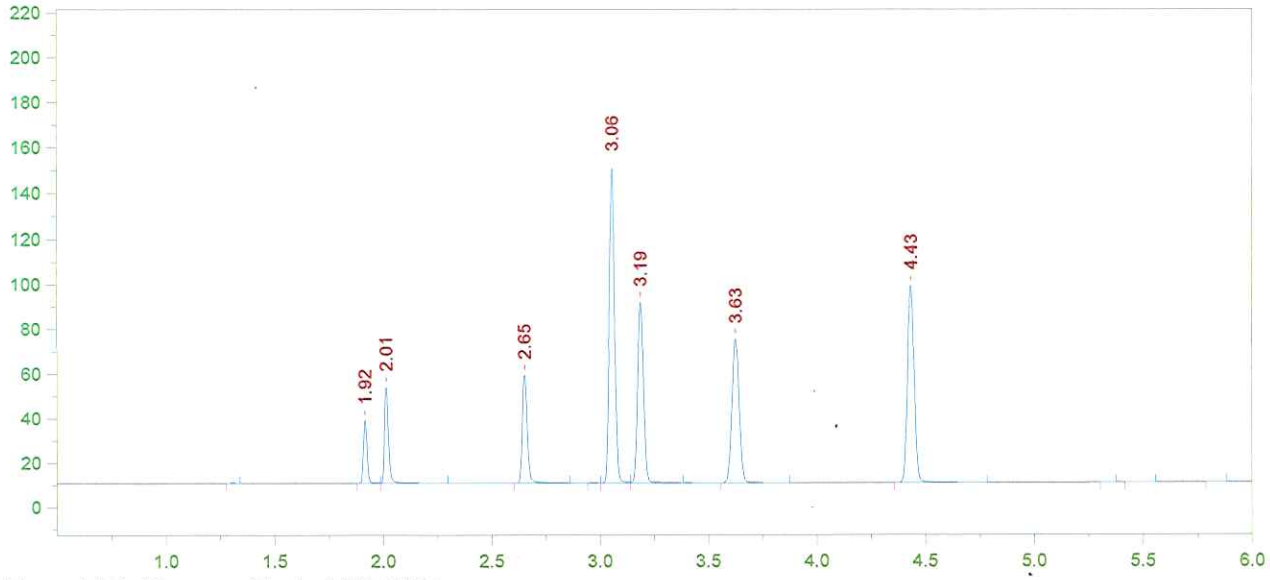
Today's Date = 12/2/2015
Today's Time = 7:55:00 AM
Bound File Name = VFL12012015.0001.RAW
Sample Name = BLANK
Date Taken = 12/1/2015 9:57:24 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
5	3.63	t-Butanol	152051	0.9651
6	4.44	n-Propanol	201990	1.0000

15-25-100

DB

B4
DB 12/1/15



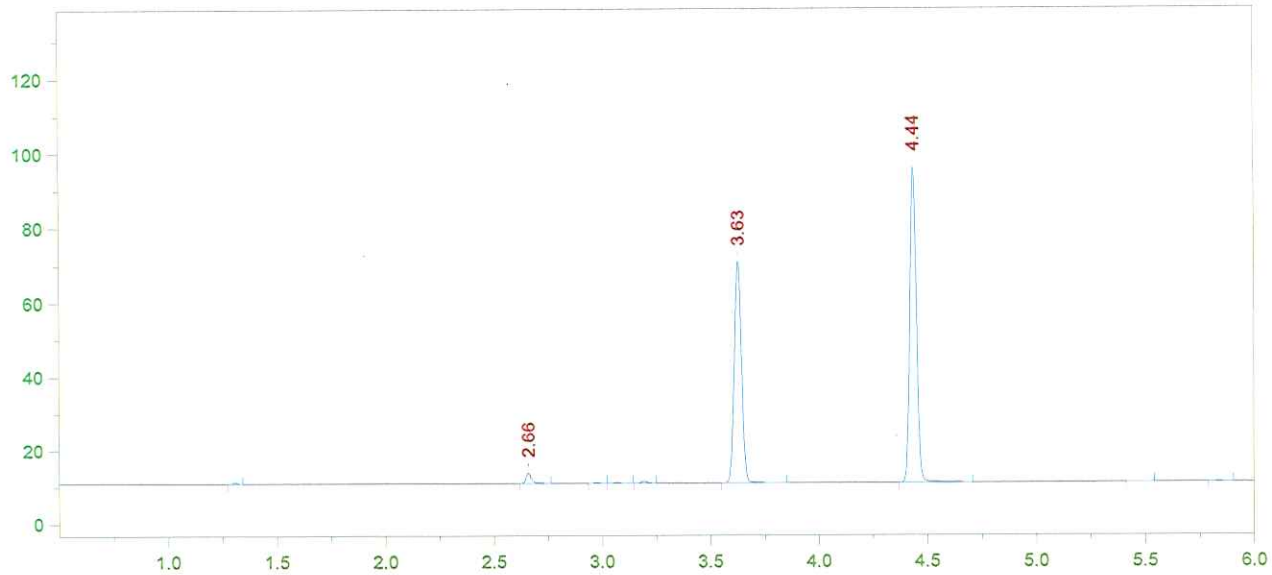
Format File Name = AlcoholVFL.FMT

Today's Date = 12/2/2015
Today's Time = 7:55:13 AM
Bound File Name = VFL12012015.0002.RAW
Sample Name = TMX
Date Taken = 12/1/2015 10:13:46 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	1.92	Acetaldehyde	33295	0.0686
4	2.01	Methanol	54813	0.1169
5	2.65	Ethanol	76691	0.0785
7	3.06	Acetone	239611	0.0612
8	3.19	Isopropanol	152510	0.0780
9	3.63	t-Butanol	148998	1.0217
10	4.43	n-Propanol	186984	1.0000

15-25-100

45



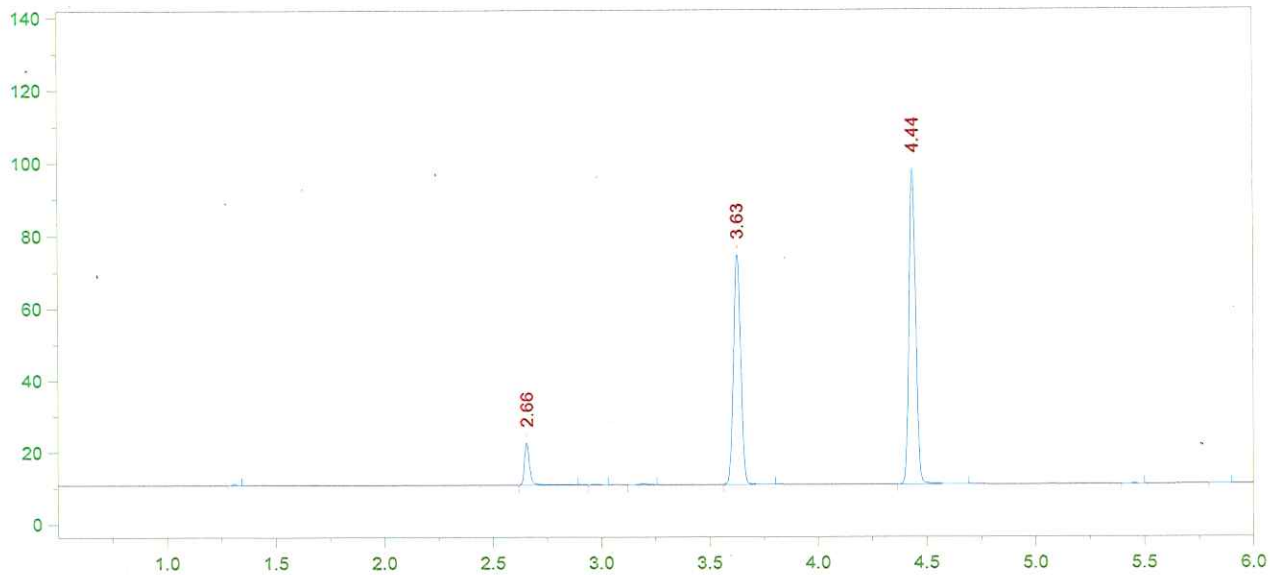
Format File Name = AlcoholVFL.FMT

Today's Date = 12/2/2015
Today's Time = 7:55:20 AM
Bound File Name = VFL12012015.0003.RAW
Sample Name = STD A
Date Taken = 12/1/2015 10:27:51 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.66	Ethanol	04858	0.0051
7	3.63	t-Butanol	138898	0.9859
8	4.44	n-Propanol	180628	1.0000

15-25-100

12/4/15



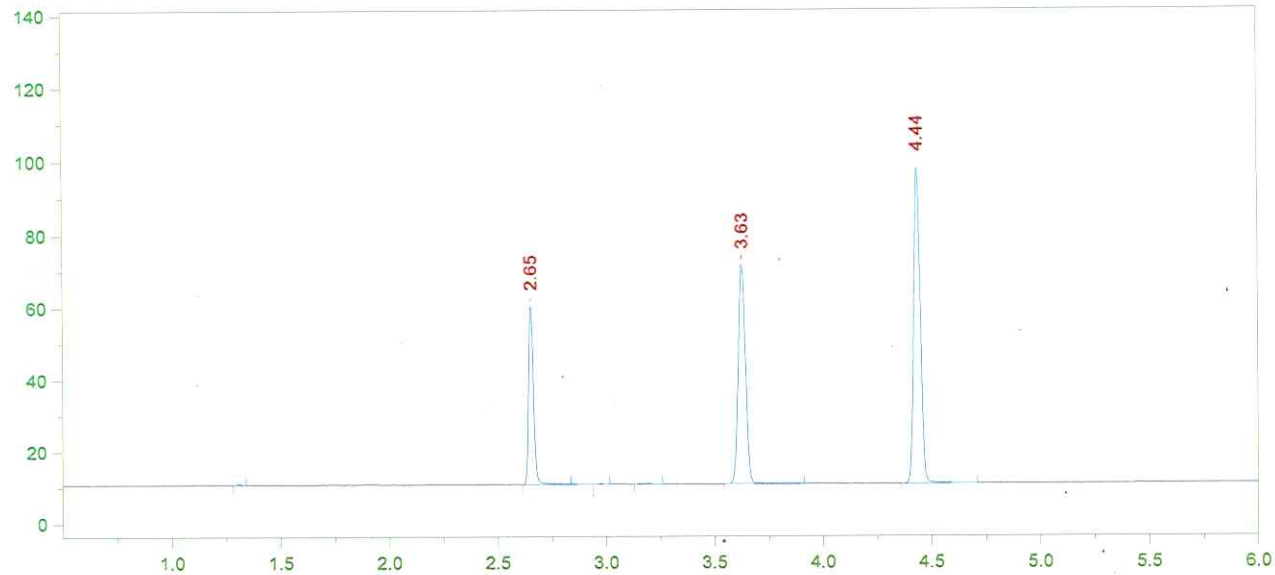
Format File Name = AlcoholVFL.FMT

Today's Date = 12/2/2015
Today's Time = 7:55:26 AM
Bound File Name = VFL12012015.0004.RAW
Sample Name = STD B
Date Taken = 12/1/2015 10:45:07 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.66	Ethanol	18933	0.0196
6	3.63	t-Butanol	148022	1.0294
7	4.44	n-Propanol	184370	1.0000

15-25-100

67
DO 12/4/15



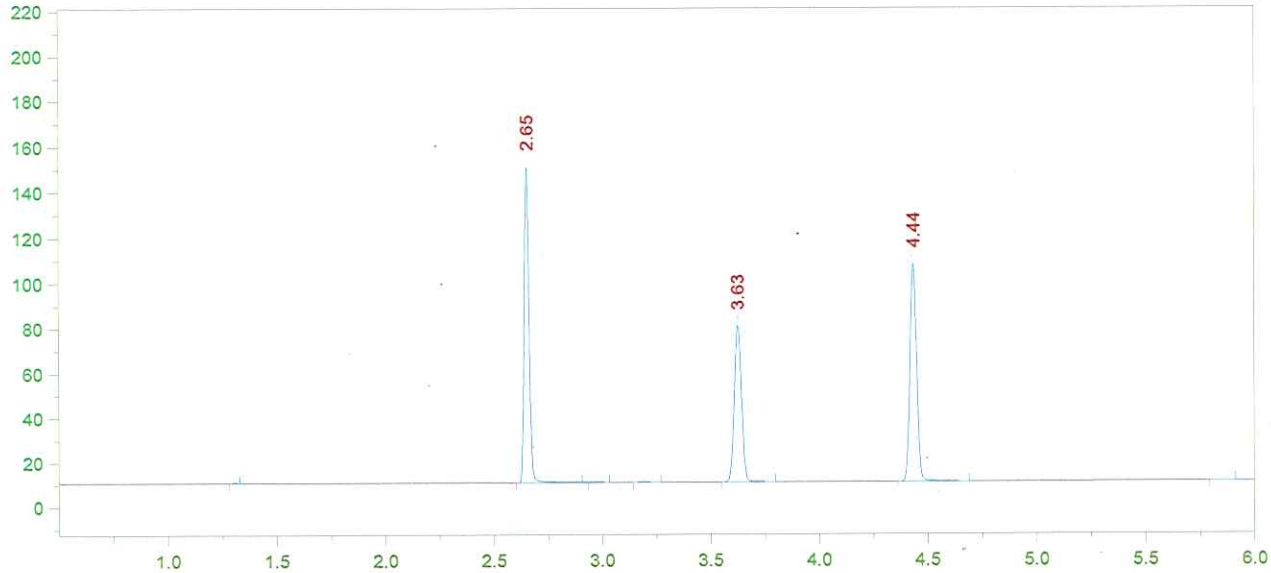
Format File Name = AlcoholVFL.FMT

Today's Date = 12/2/2015
Today's Time = 7:55:33 AM
Bound File Name = VFL12012015.0005.RAW
Sample Name = STD C
Date Taken = 12/1/2015 10:59:05 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	76884	0.0799
6	3.63	t-Butanol	141075	0.9823
7	4.44	n-Propanol	184140	1.0000

15-25-100

12/4/15



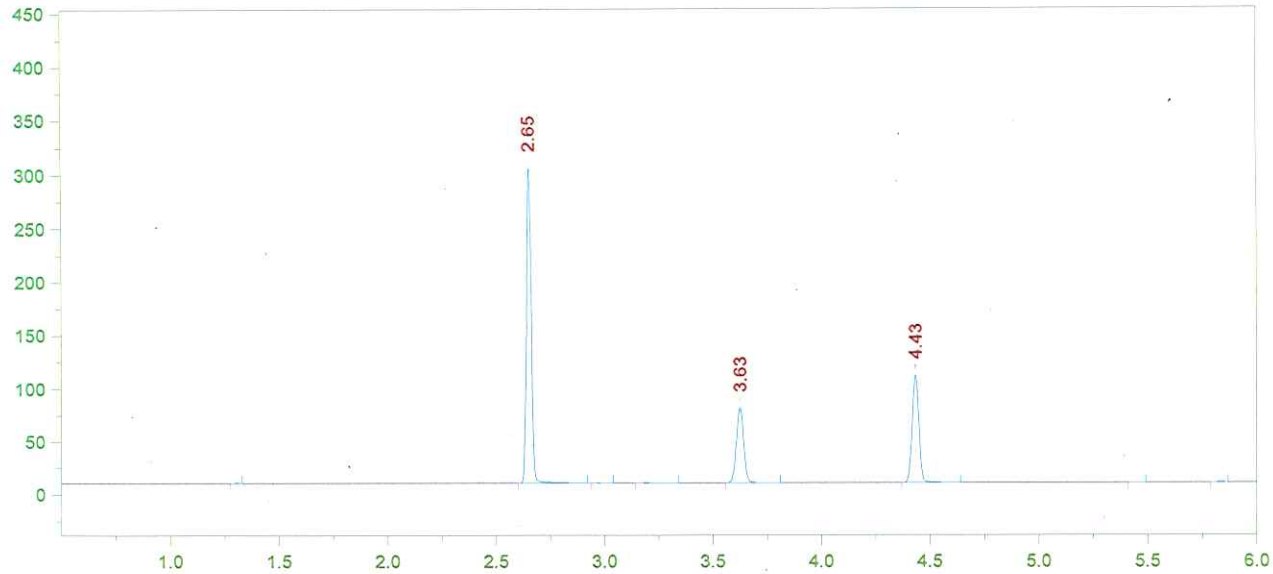
Format File Name = AlcoholVFL.FMT

Today's Date = 12/2/2015
Today's Time = 7:55:39 AM
Bound File Name = VFL12012015.0006.RAW
Sample Name = STD D
Date Taken = 12/1/2015 11:14:49 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	214096	0.1988
5	3.63	t-Butanol	161165	1.0029
6	4.44	n-Propanol	206032	1.0000

15-25-100

12/2/15



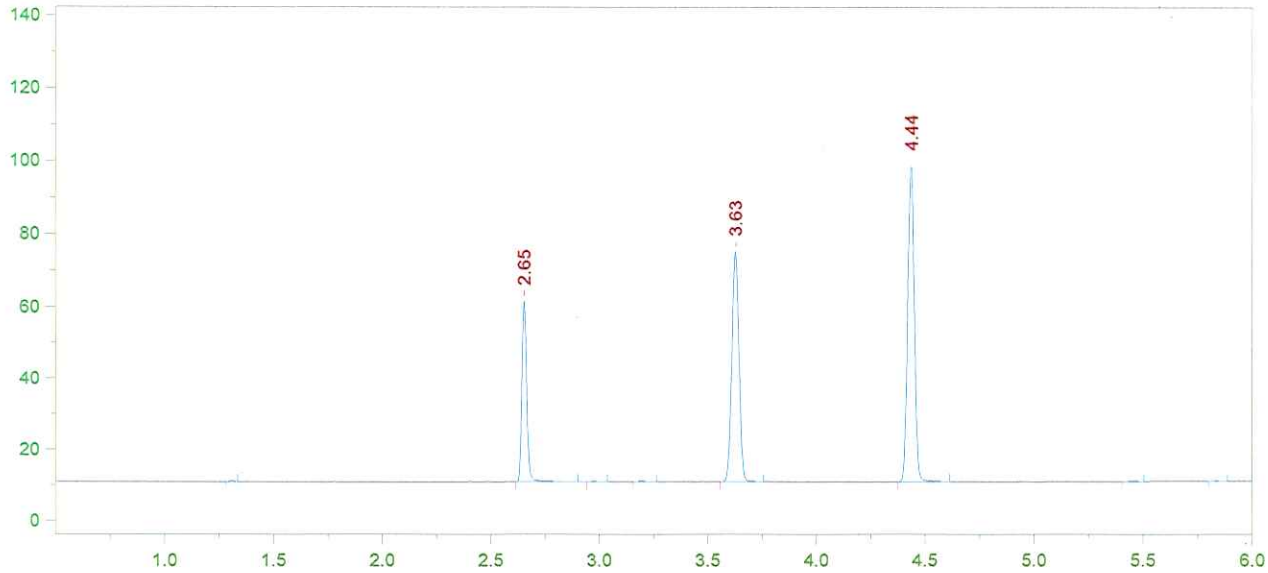
Format File Name = AlcoholVFL.FMT

Today's Date = 12/2/2015
Today's Time = 7:55:45 AM
Bound File Name = VFL12012015.0007.RAW
Sample Name = STD E
Date Taken = 12/1/2015 11:29:42 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	451886	0.4006
6	3.63	t-Butanol	164617	0.9778
7	4.43	n-Propanol	215842	1.0000

15-25-100

DS 12/4/15



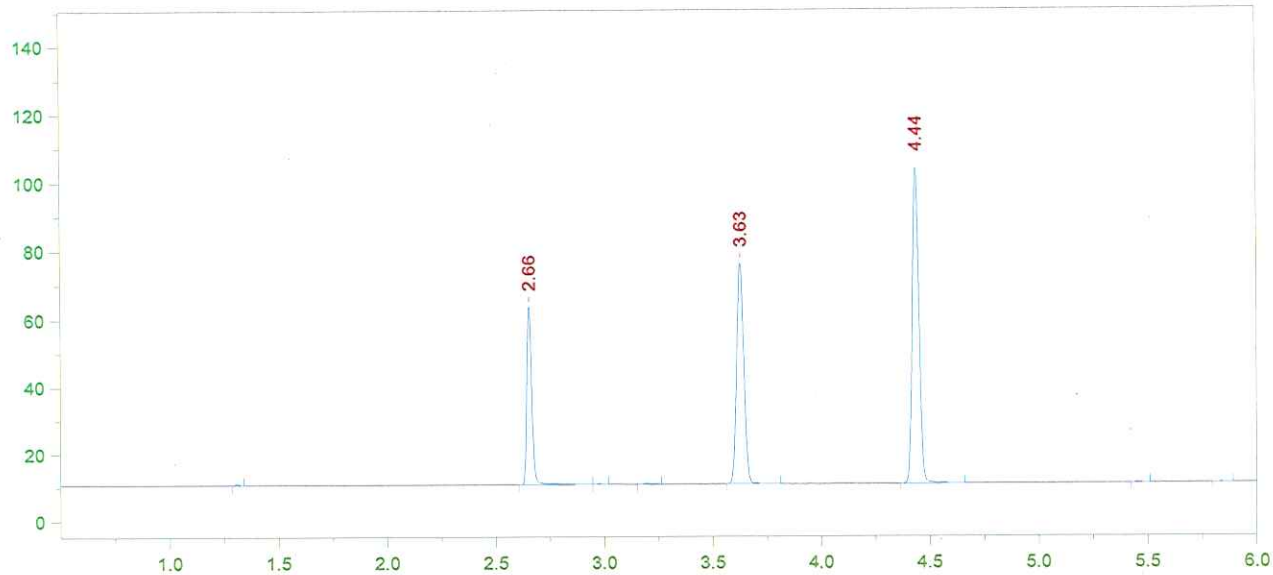
Format File Name = AlcoholVFL.FMT

Today's Date = 12/1/2015
Today's Time = 11:46:27 AM
Bound File Name = VFL12012015.0008.RAW
Sample Name = AQ
Date Taken = 12/1/2015 11:46:23 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	78352	0.0806
5	3.63	t-Butanol	147834	1.0184
6	4.44	n-Propanol	186121	1.0000

15-25-100

10-11



Format File Name = AlcoholVFL.FMT

Today's Date = 12/1/2015
Today's Time = 12:00:37 PM
Bound File Name = VFL12012015.0009.RAW
Sample Name = AQ
Date Taken = 12/1/2015 12:00:31 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.66	Ethanol	82811	0.0802
6	3.63	t-Butanol	150866	0.9785
7	4.44	n-Propanol	197679	1.0000

AQ nom: 0.0804 g/100ml ethanol

±5% = 0.0764 - 0.0844

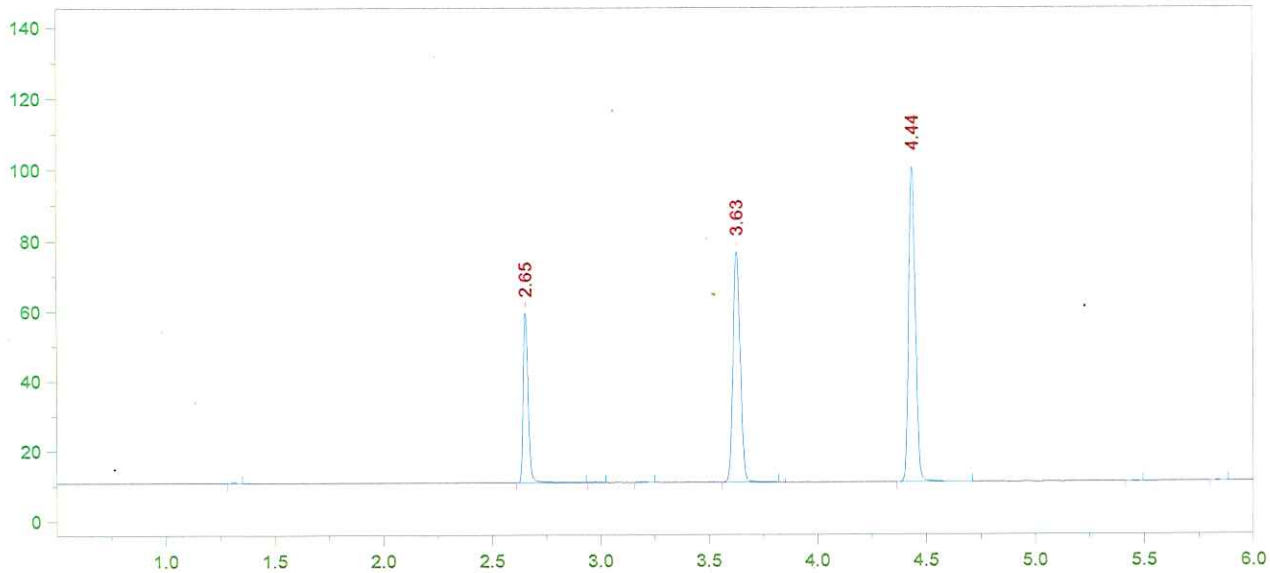
Recovery: $\frac{0.080}{0.080}$ = 100%

DS 12/2/15

15-25-100

DS

#12
DS 12/4/15



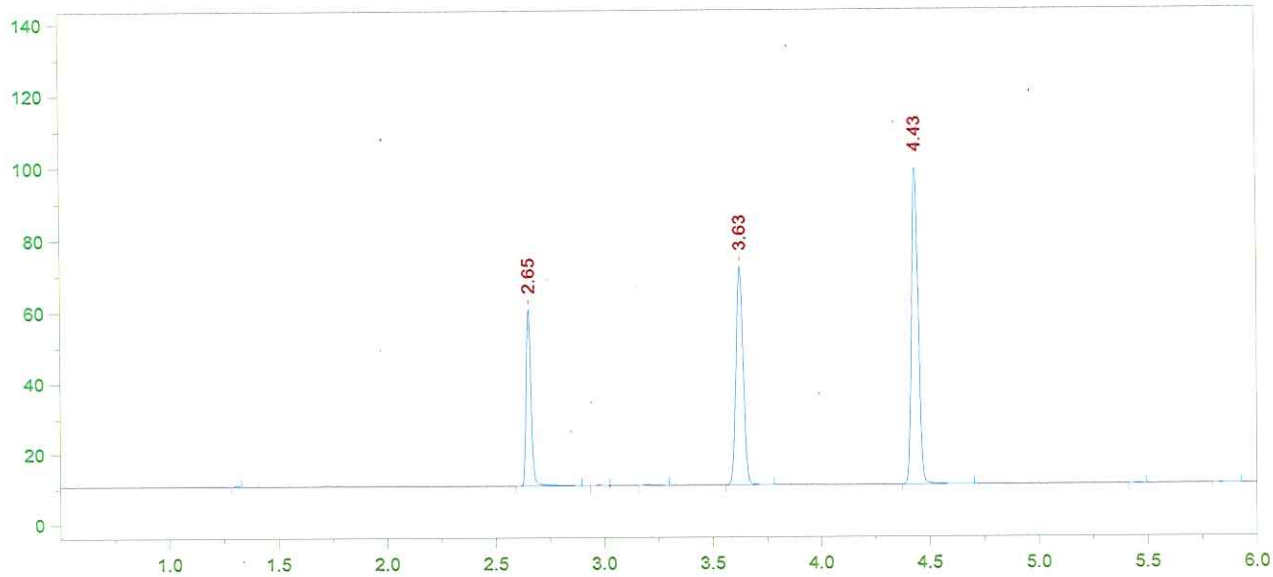
Format File Name = AlcoholVFL.FMT

Today's Date = 12/1/2015
Today's Time = 12:17:52 PM
Bound File Name = VFL12012015.0010.RAW
Sample Name = CCS
Date Taken = 12/1/2015 12:17:47 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	76033	0.0764
6	3.63	t-Butanol	151866	1.0223
7	4.44	n-Propanol	190471	1.0000

15-25-100

12/13
12/14/15



Format File Name = AlcoholVFL.FMT

Today's Date = 12/1/2015
Today's Time = 12:32:15 PM
Bound File Name = VFL12012015.0011.RAW
Sample Name = CCS
Date Taken = 12/1/2015 12:32:06 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	77479	0.0790
6	3.63	t-Butanol	141395	0.9658
7	4.43	n-Propanol	187703	1.0000

CCS Mean: 0.0777 [illegible]

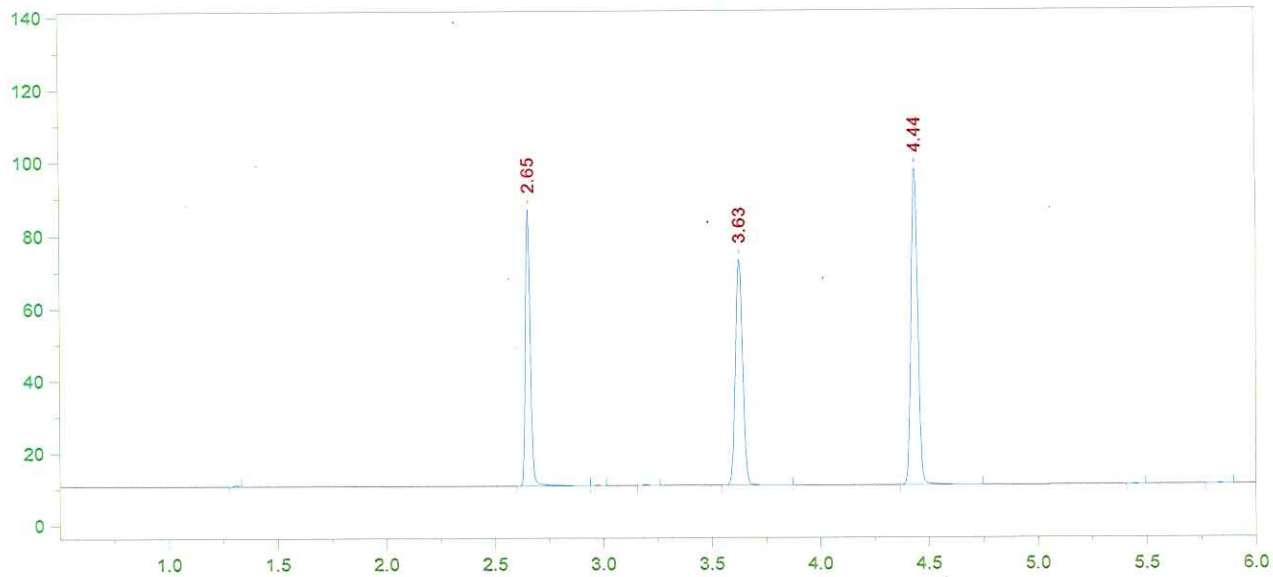
±2σ: 0.0738 - 0.0816

Recovery: $\frac{0.078}{0.080}$ = 97.5%

[illegible] 12/2/15

15-25-100

[illegible] [illegible] 12/14/15



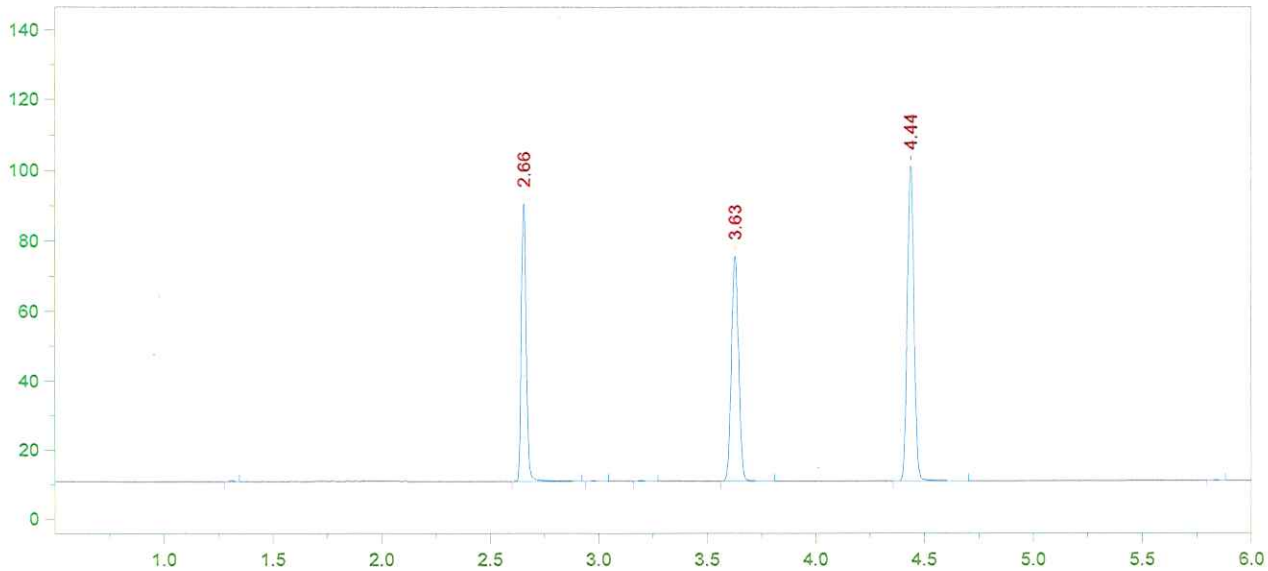
Format File Name = simsolnVFL.met.FMT

Today's Date = 12/1/2015
Today's Time = 12:49:19 PM
Bound File Name = VFL12012015.0012.RAW
Sample Name = 100 DP
Date Taken = 12/1/2015 12:49:12 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
3	2.65	Ethanol	117294	0.1210	0.0988
6	3.63	t-Butanol	144118	0.9963	0.8132
7	4.44	n-Propanol	185455	1.0000	0.8162

15-25-100

DS 14 15
DS 12/14/15

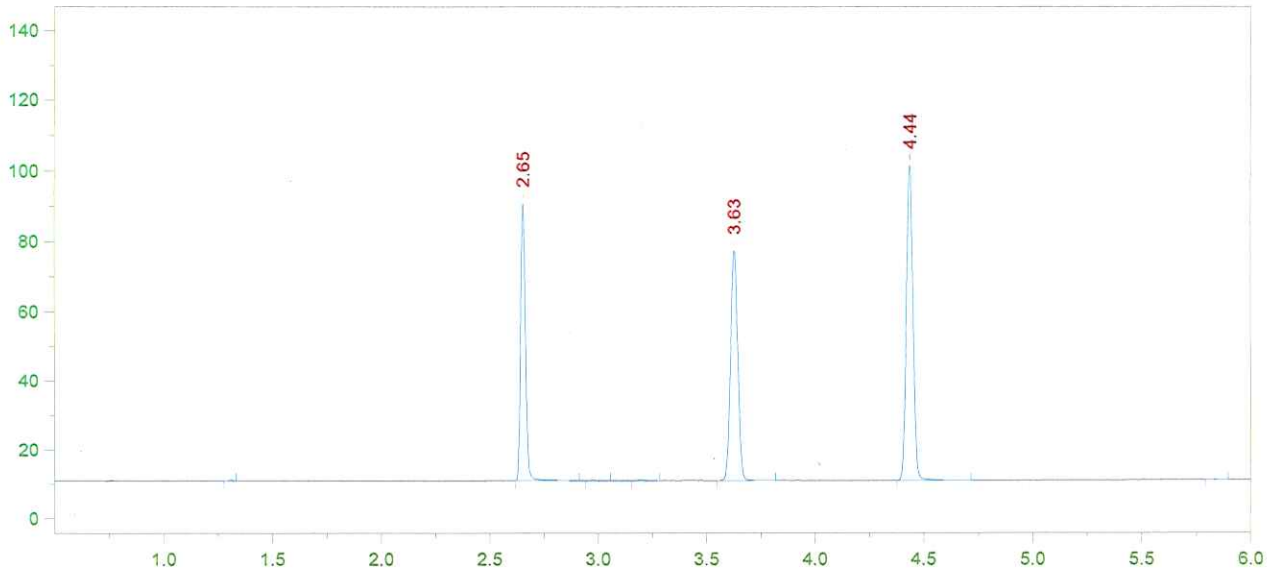


Format File Name = simsolnVFL.met.FMT

Today's Date = 12/1/2015
Today's Time = 1:03:12 PM
Bound File Name = VFL12012015.0013.RAW
Sample Name = 100 DP
Date Taken = 12/1/2015 1:03:07 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
3	2.66	Ethanol	124247	0.1234	0.1007
6	3.63	t-Butanol	149099	0.9921	0.8098
7	4.44	n-Propanol	192682	1.0000	0.8162

MS-25-100 JB ~~15~~16 12/1/15



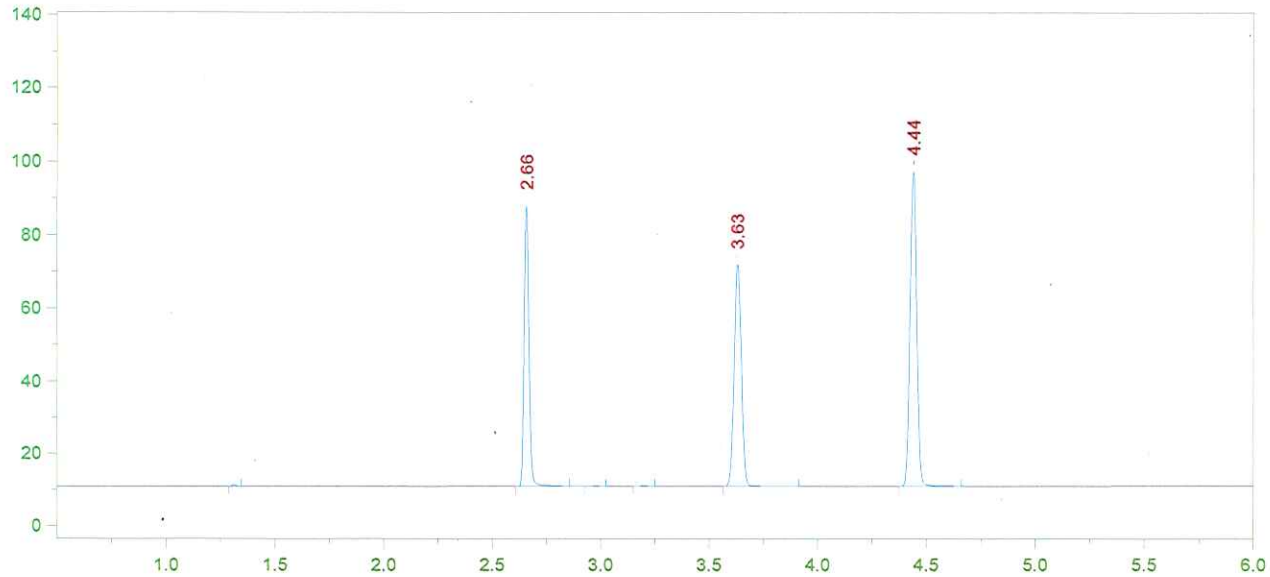
Format File Name = simsolnVFL.met.FMT

Today's Date = 12/1/2015
Today's Time = 1:20:43 PM
Bound File Name = VFL12012015.0014.RAW
Sample Name = 100 DP
Date Taken = 12/1/2015 1:20:37 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
3	2.65	Ethanol	122684	0.1219	0.0995
6	3.63	t-Butanol	153956	1.0249	0.8365
7	4.44	n-Propanol	192591	1.0000	0.8162

15-25-100

~~16~~ 17
2012/01/15



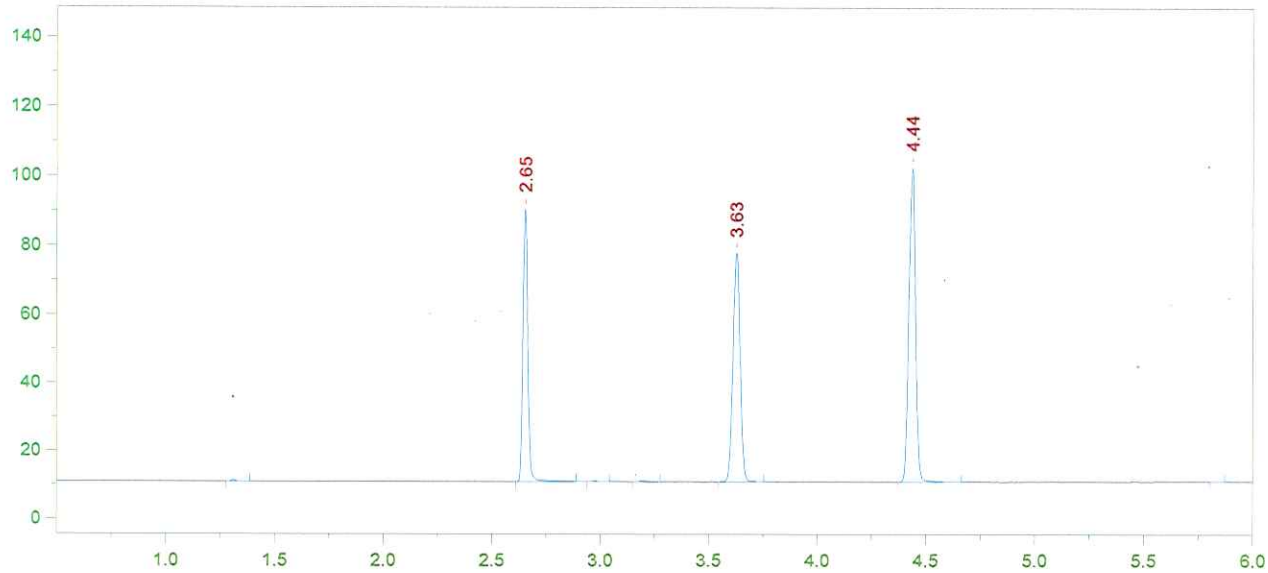
Format File Name = simsolnVFL.met.FMT

Today's Date = 12/1/2015
Today's Time = 1:35:13 PM
Bound File Name = VFL12012015.0015.RAW
Sample Name = 100 DP
Date Taken = 12/1/2015 1:35:04 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
3	2.66	Ethanol	118604	0.1239	0.1012
6	3.63	t-Butanol	141352	0.9898	0.8079
7	4.44	n-Propanol	183104	1.0000	0.8162

15-25-100

~~17~~ 18
12/1/15



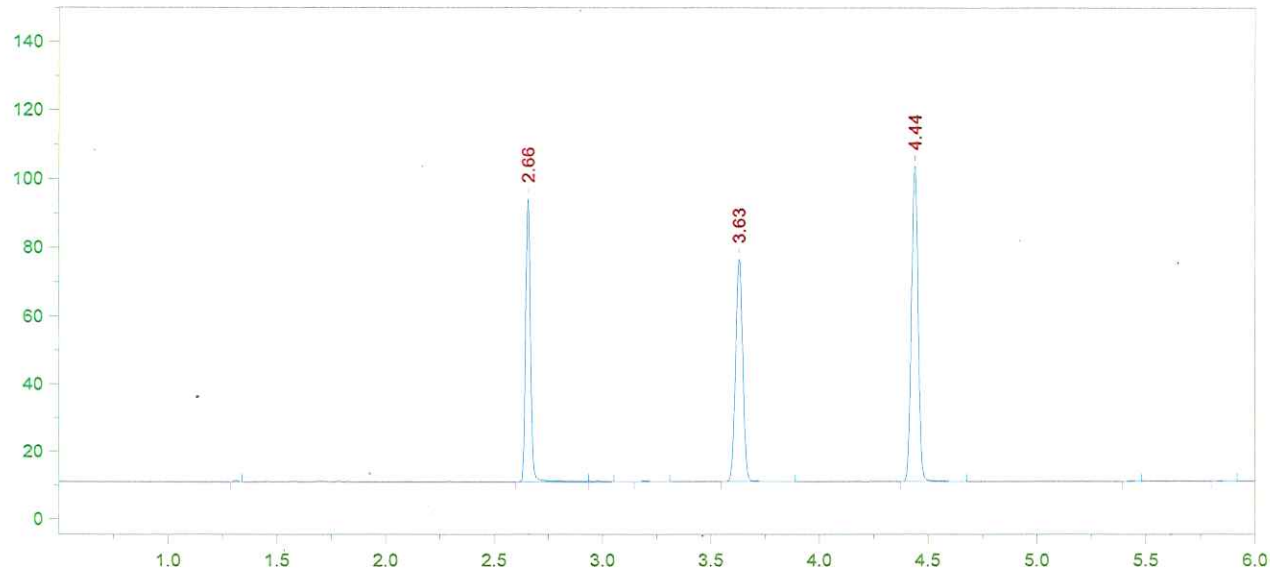
Format File Name = simsolnVFL.met.FMT

Today's Date = 12/1/2015
Today's Time = 1:52:10 PM
Bound File Name = VFL12012015.0016.RAW
Sample Name = 100 DP
Date Taken = 12/1/2015 1:52:01 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	122980	0.1214	0.0991
5	3.63	t-Butanol	155001	1.0254	0.8369
6	4.44	n-Propanol	193812	1.0000	0.8162

15-25-100

18-19



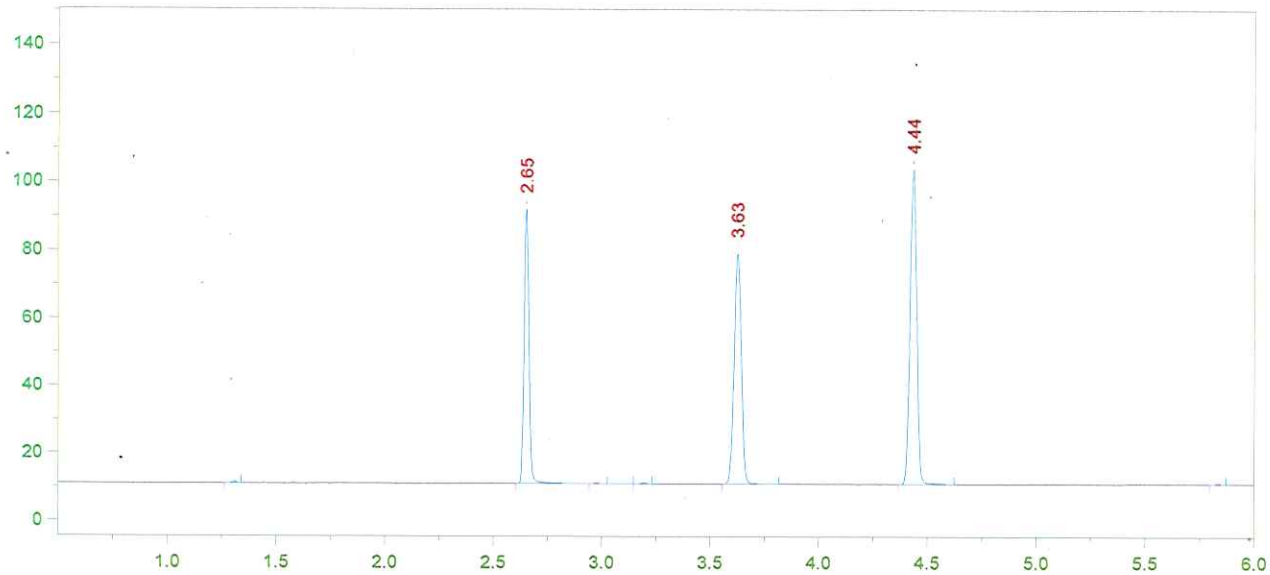
Format File Name = simsolnVFL.met.FMT

Today's Date = 12/1/2015
Today's Time = 2:07:05 PM
Bound File Name = VFL12012015.0017.RAW
Sample Name = 100 DP
Date Taken = 12/1/2015 2:06:56 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
3	2.66	Ethanol	128188	0.1243	0.1015
6	3.63	t-Butanol	151670	0.9856	0.8044
7	4.44	n-Propanol	197308	1.0000	0.8162

15-25-100

~~19~~ 20



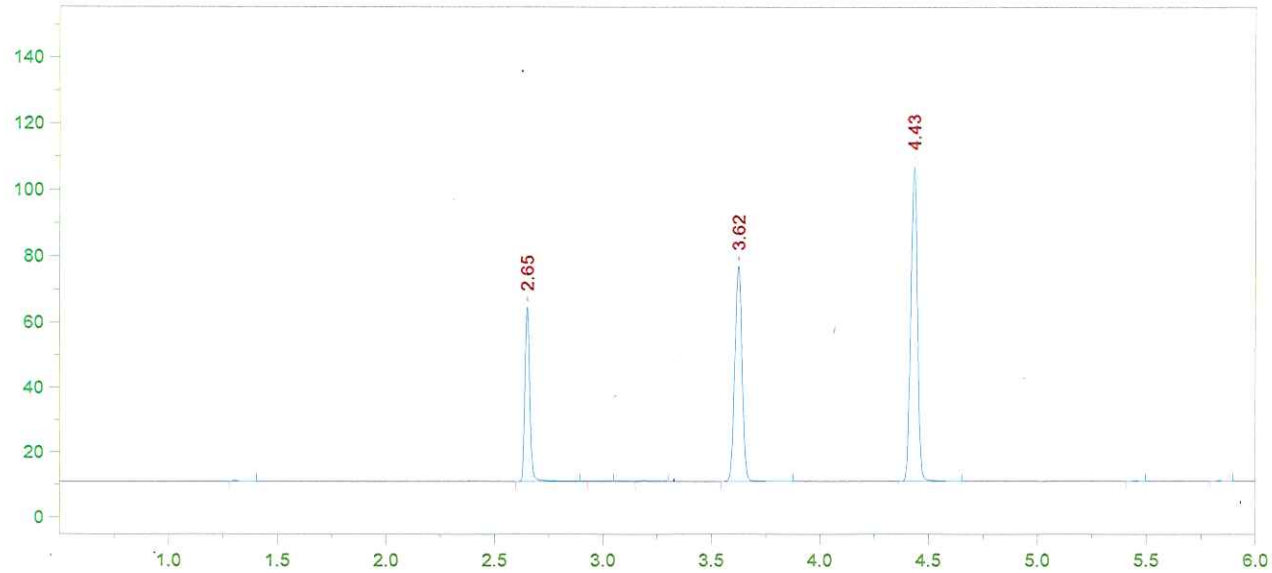
Format File Name = simsolnVFL.met.FMT

Today's Date = 12/1/2015
Today's Time = 2:21:47 PM
Bound File Name = VFL12012015.0018.RAW
Sample Name = 100 DP
Date Taken = 12/1/2015 2:21:42 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
3	2.65	Ethanol	125687	0.1217	0.0993
6	3.63	t-Butanol	157201	1.0201	0.8326
7	4.44	n-Propanol	197587	1.0000	0.8162

15-25-100

2021



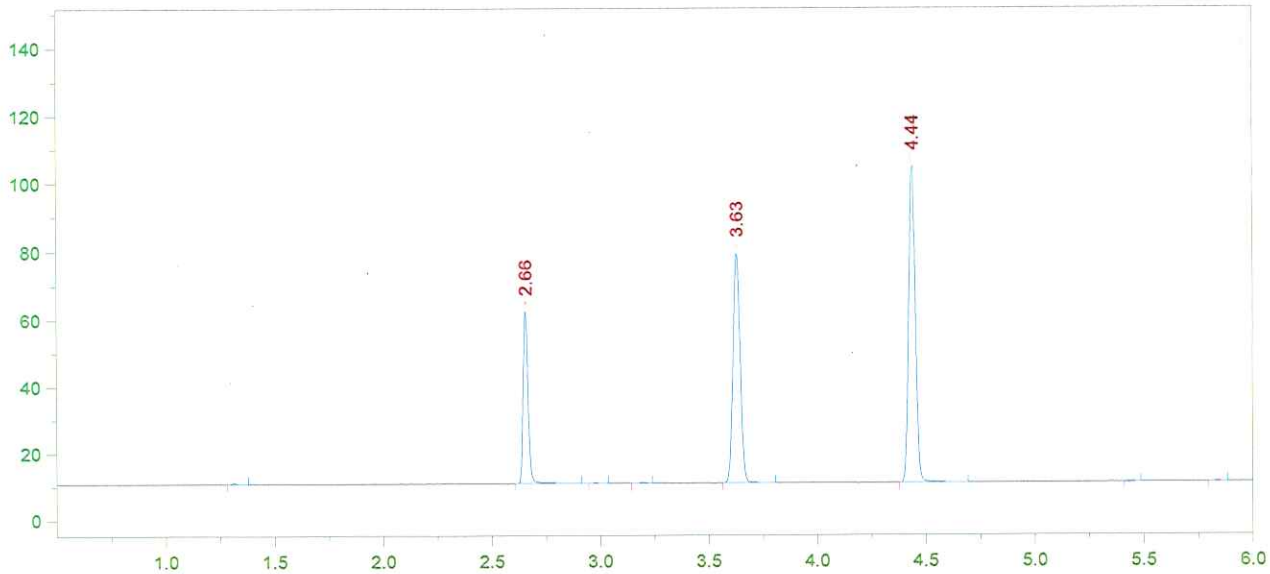
Format File Name = AlcoholVFL.FMT

Today's Date = 12/1/2015
Today's Time = 2:38:28 PM
Bound File Name = VFL12012015.0019.RAW
Sample Name = CCS
Date Taken = 12/1/2015 2:38:21 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	83634	0.0787
6	3.62	t-Butanol	153547	0.9680
7	4.43	n-Propanol	203374	1.0000

15-25-100

~~2~~ 22



Format File Name = AlcoholVFL.FMT

Today's Date = 12/1/2015
Today's Time = 2:53:21 PM
Bound File Name = VFL12012015.0020.RAW
Sample Name = CCS
Date Taken = 12/1/2015 2:53:14 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	79726	0.0766
5	3.63	t-Butanol	157196	1.0124
6	4.44	n-Propanol	199071	1.0000

CCS Mid: 0.0776 g/100m EtOH

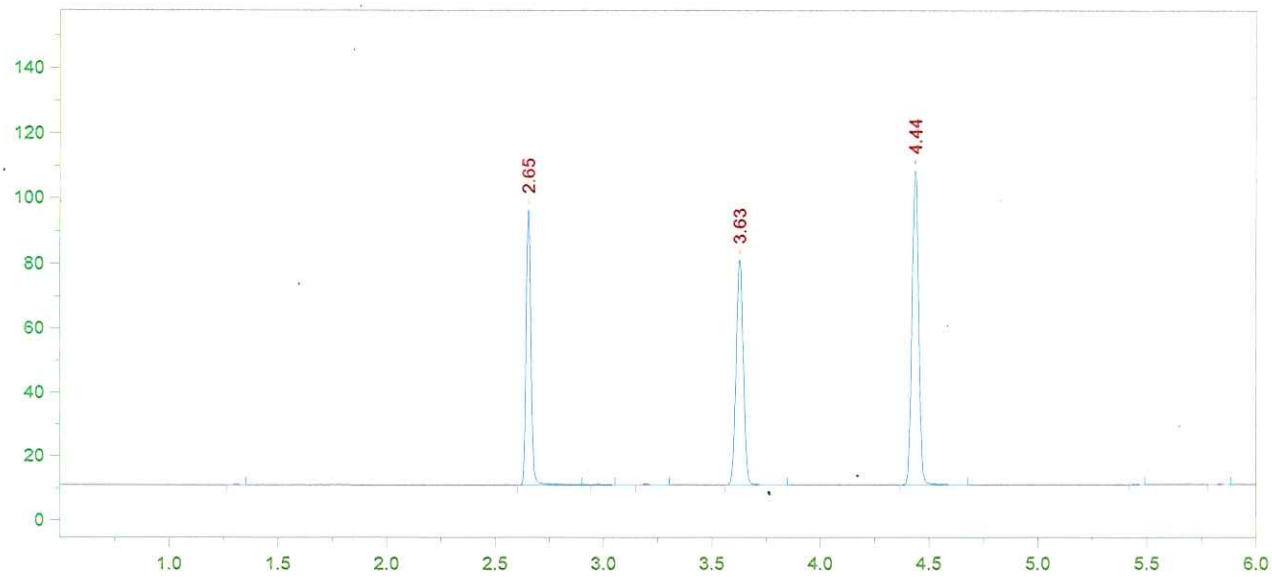
±5%: 0.0737 - 0.0815

Recovery: $\frac{0.077}{0.080}$ = 96.2%

[illegible] 12/1/15

15-25-100

[illegible] 2223 12/01/15



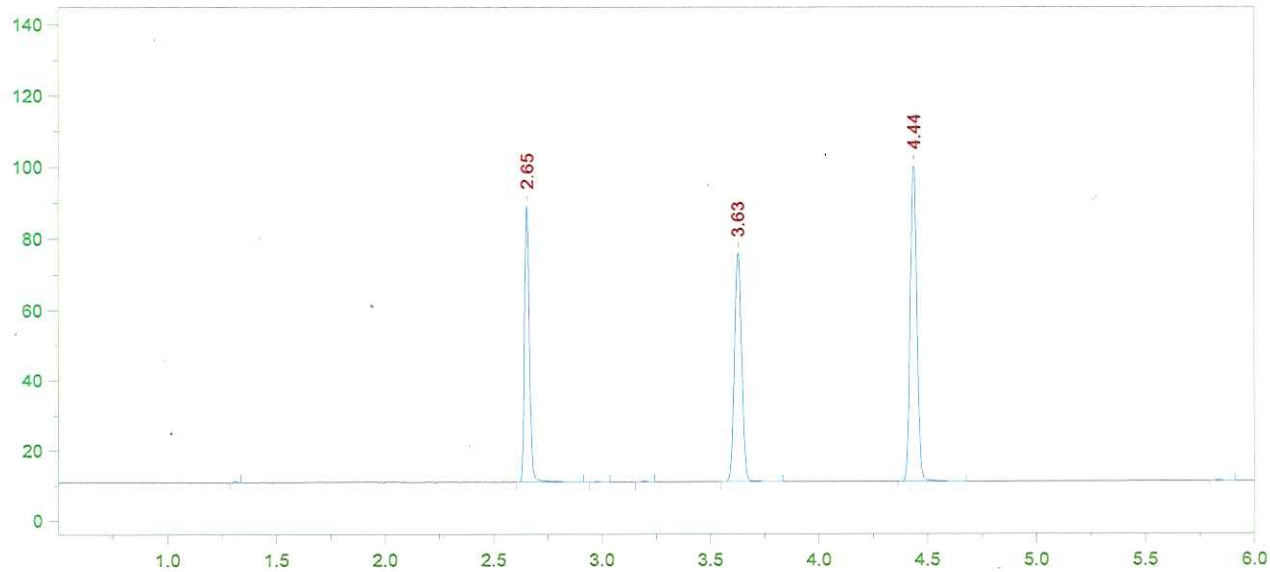
Format File Name = simsolnVFL.met.FMT

Today's Date = 12/1/2015
Today's Time = 3:08:07 PM
Bound File Name = VFL12012015.0021.RAW
Sample Name = 100 JD
Date Taken = 12/1/2015 3:08:02 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
3	2.65	Ethanol	131697	0.1215	0.0992
6	3.63	t-Butanol	162586	1.0054	0.8206
7	4.44	n-Propanol	207327	1.0000	0.8162

15-25-100

~~23~~ 24
12/14/15

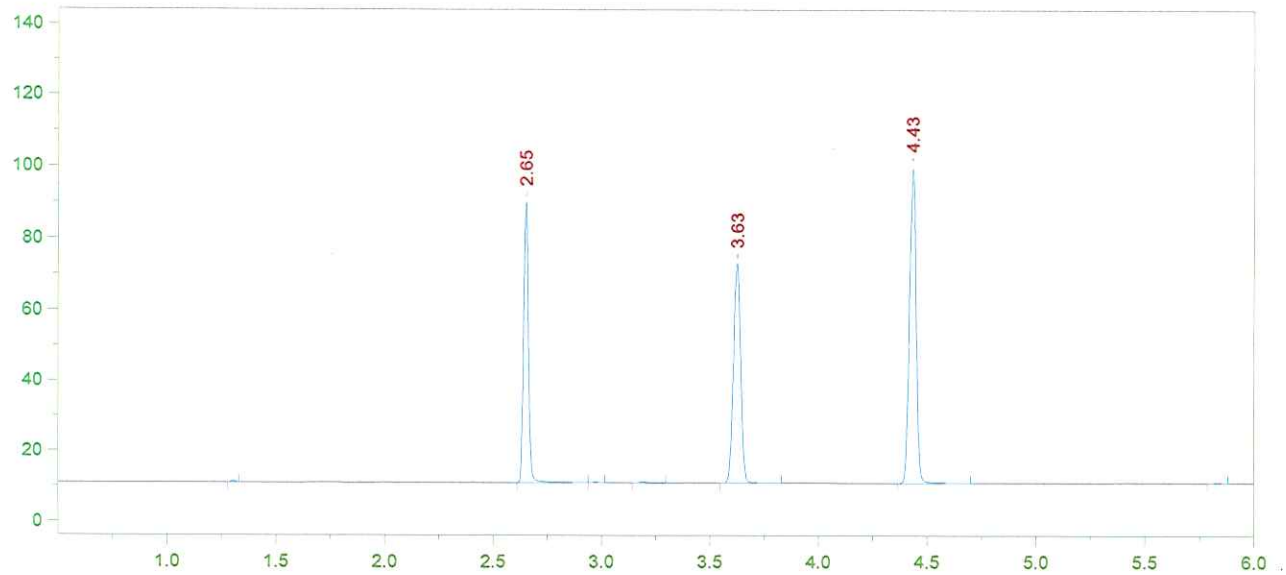


Format File Name = simsolnVFL.met.FMT

Today's Date = 12/1/2015
Today's Time = 3:24:48 PM
Bound File Name = VFL12012015.0022.RAW
Sample Name = 100 JD
Date Taken = 12/1/2015 3:24:41 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
3	2.65	Ethanol	120824	0.1221	0.0997
6	3.63	t-Butanol	150232	1.0172	0.8302
7	4.44	n-Propanol	189360	1.0000	0.8162

15-25-100 Qs 2425 Qs 12/1/2015



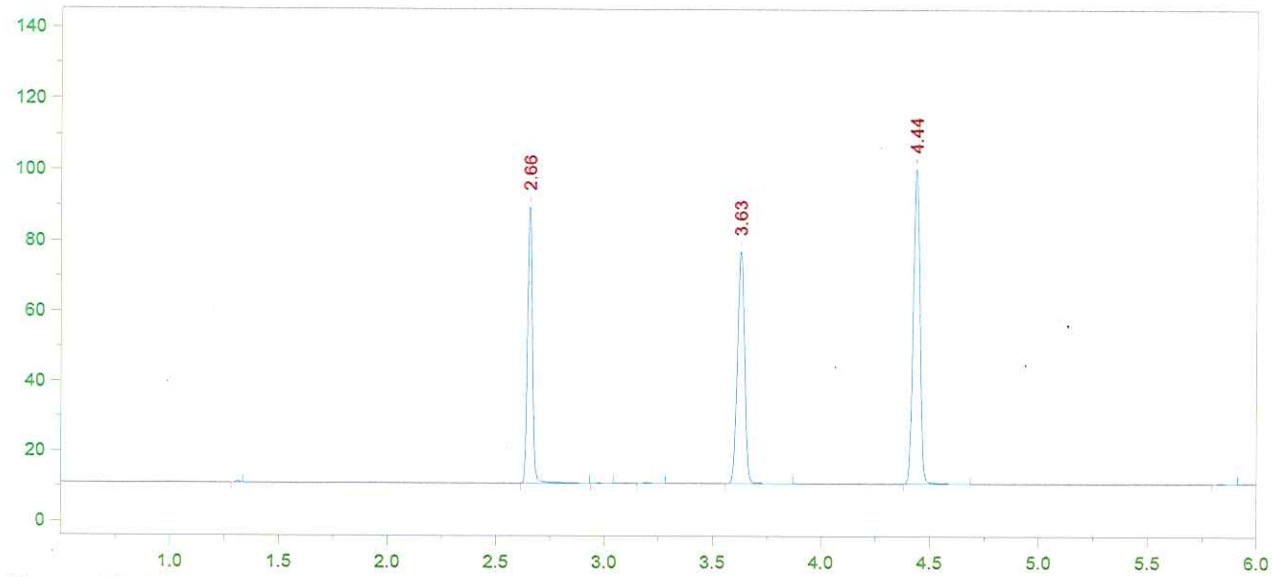
Format File Name = simsolnVFL.met.FMT

Today's Date = 12/1/2015
Today's Time = 3:38:41 PM
Bound File Name = VFL12012015.0023.RAW
Sample Name = 100 JD
Date Taken = 12/1/2015 3:38:31 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
3	2.65	Ethanol	122150	0.1240	0.1012
6	3.63	t-Butanol	143623	0.9771	0.7975
7	4.43	n-Propanol	188452	1.0000	0.8162

15-25-100

25-26



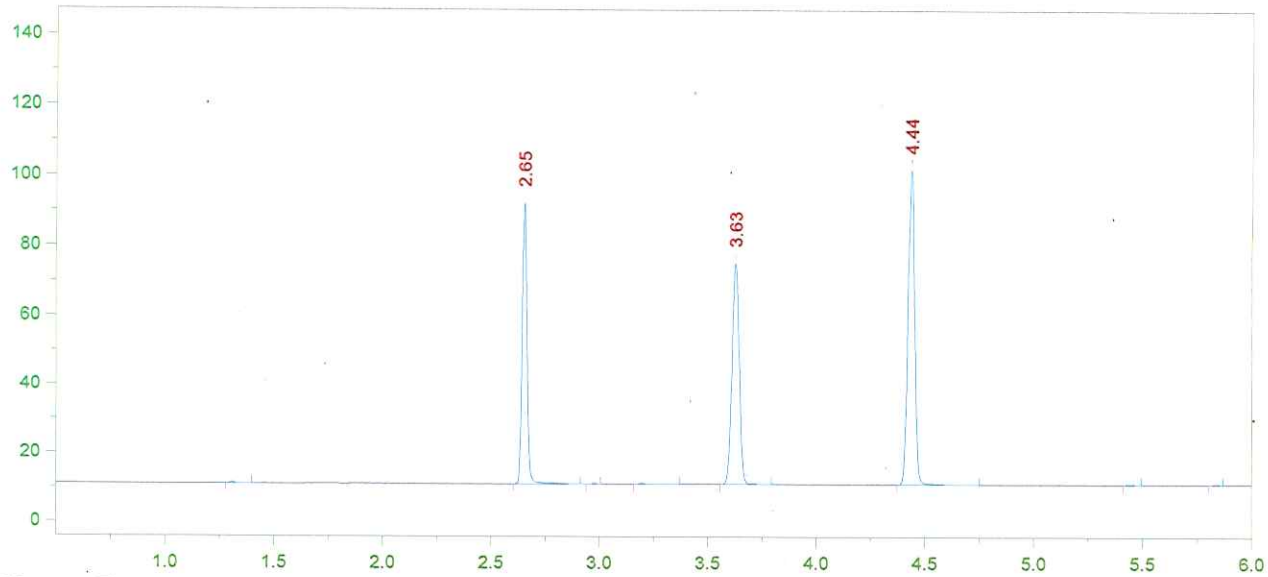
Format File Name = simsolnVFL.met.FMT

Today's Date = 12/1/2015
Today's Time = 3:56:10 PM
Bound File Name = VFL12012015.0024.RAW
Sample Name = 100 JD
Date Taken = 12/1/2015 3:56:02 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
3	2.66	Ethanol	121624	0.1217	0.0993
6	3.63	t-Butanol	152815	1.0244	0.8361
7	4.44	n-Propanol	191260	1.0000	0.8162

15-25-100

2627
12/2/15



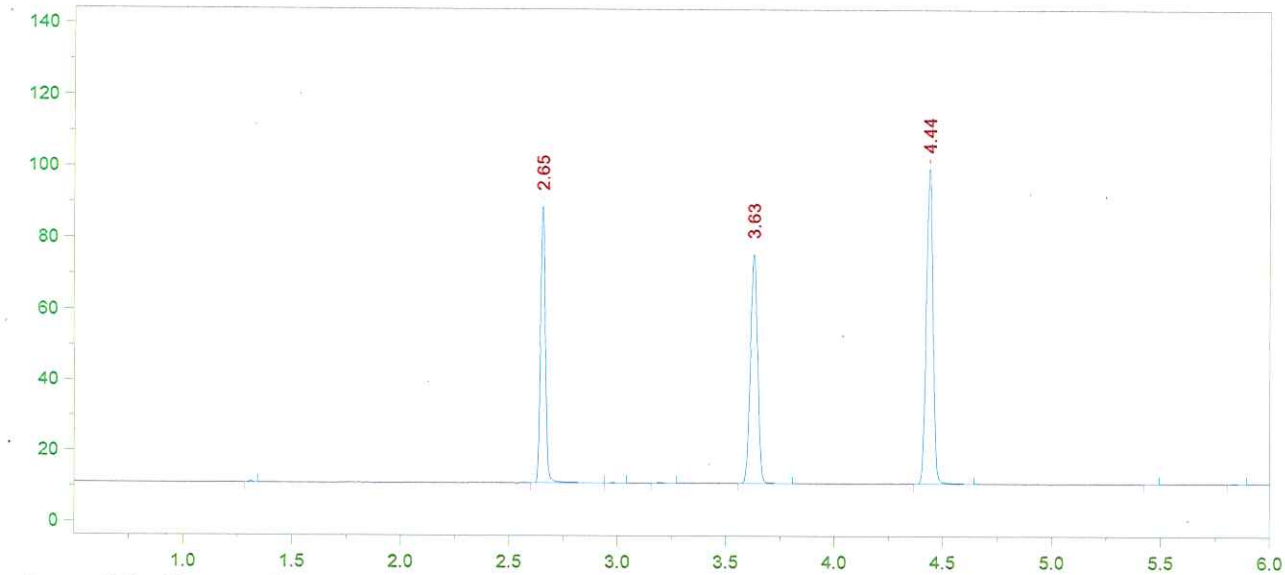
Format File Name = simsolnVFL.met.FMT

Today's Date = 12/1/2015
Today's Time = 4:11:04 PM
Bound File Name = VFL12012015.0025.RAW
Sample Name = 100 JD
Date Taken = 12/1/2015 4:10:58 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	124737	0.1240	0.1012
5	3.63	t-Butanol	148812	0.9912	0.8090
6	4.44	n-Propanol	192493	1.0000	0.8162

15-25-100

~~27~~ 28
~~28~~ 12/1/15



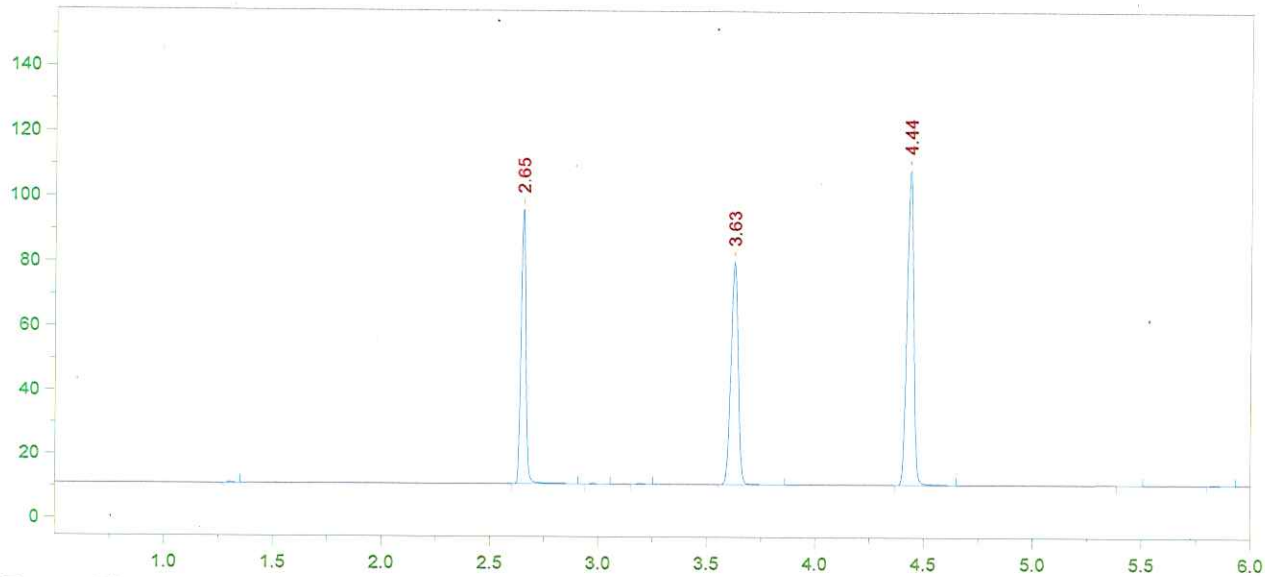
Format File Name = simsolnVFL.met.FMT

Today's Date = 12/1/2015
Today's Time = 4:27:33 PM
Bound File Name = VFL12012015.0026.RAW
Sample Name = 100 JD
Date Taken = 12/1/2015 4:27:27 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	121277	0.1231	0.1005
5	3.63	t-Butanol	149102	1.0139	0.8275
6	4.44	n-Propanol	188553	1.0000	0.8162

15-25-100

~~28~~ 29
12/4/15



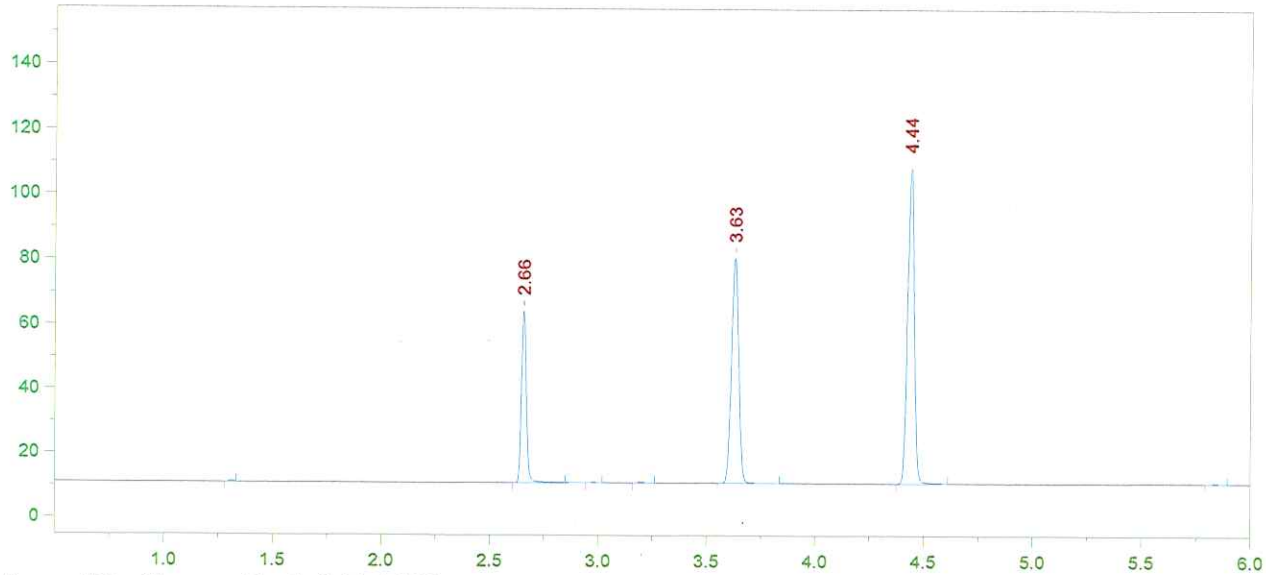
Format File Name = simsolnVFL.met.FMT

Today's Date = 12/1/2015
Today's Time = 4:40:46 PM
Bound File Name = VFL12012015.0027.RAW
Sample Name = 100 JD
Date Taken = 12/1/2015 4:40:40 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	132697	0.1222	0.0998
5	3.63	t-Butanol	160486	0.9905	0.8084
6	4.44	n-Propanol	207740	1.0000	0.8162

M5-25-100

2230
12/1/15



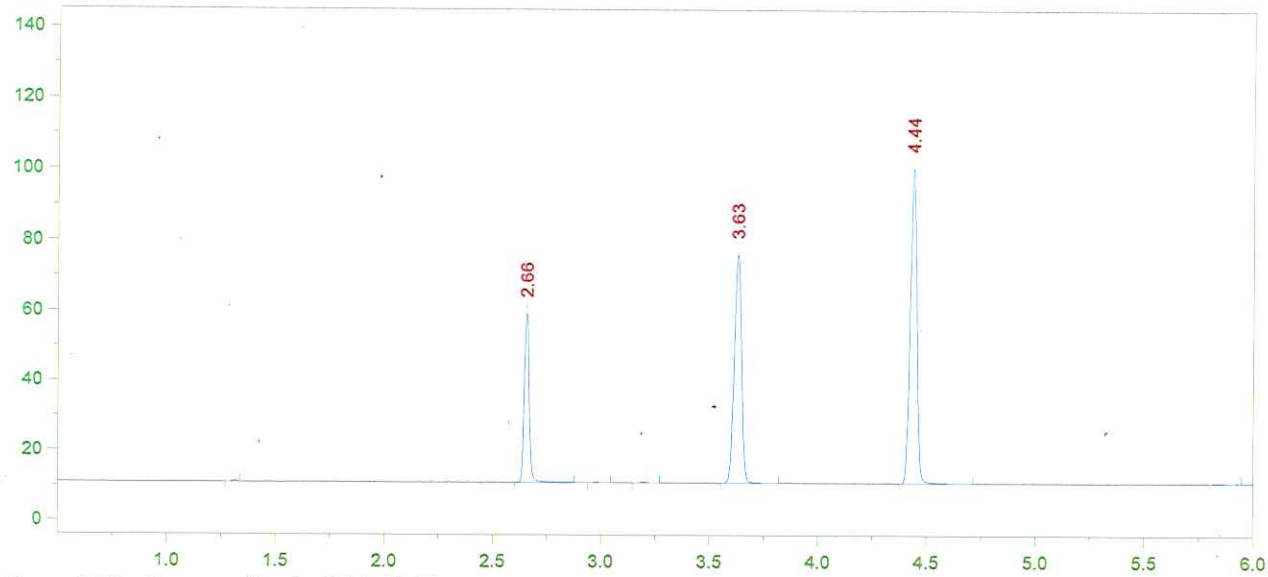
Format File Name = AlcoholVFL.FMT

Today's Date = 12/1/2015
Today's Time = 4:57:12 PM
Bound File Name = VFL12012015.0028.RAW
Sample Name = CCS
Date Taken = 12/1/2015 4:57:08 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	82577	0.0764
5	3.63	t-Butanol	161257	0.9999
6	4.44	n-Propanol	206775	1.0000

15-25-100

3031
12/1/15



Format File Name = AlcoholVFL.FMT

Today's Date = 12/1/2015
Today's Time = 5:12:09 PM
Bound File Name = VFL12012015.0029.RAW
Sample Name = CCS
Date Taken = 12/1/2015 5:12:04 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12012015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.66	Ethanol	75744	0.0765
6	3.63	t-Butanol	150761	1.0208
7	4.44	n-Propanol	189355	1.0000

CCS Mean: 0.0764 g/100mL EtOH

80%: 0.0726 - 0.0802

Recovery: $\frac{0.076}{0.080}$ = 95.0%

12/2/15

15-25-100

31-32
12/4/15

File Name = C:\Alcohol Data\VFL12022015\VFL12022015.SEQ
Version = 4
File Date = 12/3/2015 8:44:01 AM

Entry #	Raw File Name	Method File Name	Sample Name	Sample Wt.	Int. Std. Amount
1	VFL12022015.0001.raw	Blood Alc temp VFL.MET	BLANK	1.00	1.00
2	VFL12022015.0002.raw	Blood Alc temp VFL.MET	TMX	1.00	1.00
3	VFL12022015.0003.raw	Blood Alc temp VFL.MET	STD A	1.00	1.00
4	VFL12022015.0004.raw	Blood Alc temp VFL.MET	STD B	1.00	1.00
5	VFL12022015.0005.raw	Blood Alc temp VFL.MET	STD C	1.00	1.00
6	VFL12022015.0006.raw	Blood Alc temp VFL.MET	STD D	1.00	1.00
7	VFL12022015.0007.raw	Blood Alc temp VFL.MET	STD E	1.00	1.00
8	VFL12022015.0008.raw	Blood Alc temp VFL.MET	WB	1.00	1.00
9	VFL12022015.0009.raw	Blood Alc temp VFL.MET	WB	1.00	1.00
10	VFL12022015.0010.raw	Blood Alc temp VFL.MET	AQ PREP ERROR; RERUN	1.00	1.00
11	VFL12022015.0011.raw	Blood Alc temp VFL.MET	AQ DS 12/3/15	1.00	1.00
12	VFL12022015.0012.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
13	VFL12022015.0013.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
14	VFL12022015.0014.raw	simsoln.met	100 DP	1.00	1.00
15	VFL12022015.0015.raw	simsoln.met	100 DP	1.00	1.00
16	VFL12022015.0016.raw	simsoln.met	100 DP	1.00	1.00
17	VFL12022015.0017.raw	simsoln.met	100 DP	1.00	1.00
18	VFL12022015.0018.raw	simsoln.met	100 DP	1.00	1.00
19	VFL12022015.0019.raw	simsoln.met	100 DP	1.00	1.00
20	VFL12022015.0020.raw	simsoln.met	100 DP	1.00	1.00
21	VFL12022015.0021.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
22	VFL12022015.0022.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
23	VFL12022015.0023.raw	simsoln.met	100 JD	1.00	1.00
24	VFL12022015.0024.raw	simsoln.met	100 JD	1.00	1.00
25	VFL12022015.0025.raw	simsoln.met	100 JD	1.00	1.00
26	VFL12022015.0026.raw	simsoln.met	100 JD	1.00	1.00
27	VFL12022015.0027.raw	simsoln.met	100 JD	1.00	1.00
28	VFL12022015.0028.raw	simsoln.met	100 JD	1.00	1.00
29	VFL12022015.0029.raw	simsoln.met	100 JD	1.00	1.00
30	VFL12022015.0030.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
31	VFL12022015.0031.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
32	VFL12022015.0032.raw	Blood Alc temp VFL.MET	V15-2049 A1-1	1.00	1.00
33	VFL12022015.0033.raw	Blood Alc temp VFL.MET	V15-2049 A1-1	1.00	1.00
34	VFL12022015.0034.raw	Blood Alc temp VFL.MET	V15-2050 A1-1	1.00	1.00
35	VFL12022015.0035.raw	Blood Alc temp VFL.MET	V15-2050 A1-1	1.00	1.00
36	VFL12022015.0036.raw	Blood Alc temp VFL.MET	V15-2051 A1-1	1.00	1.00
37	VFL12022015.0037.raw	Blood Alc temp VFL.MET	V15-2051 A1-1	1.00	1.00
38	VFL12022015.0038.raw	Blood Alc temp VFL.MET	V15-2054 A1-1	1.00	1.00
39	VFL12022015.0039.raw	Blood Alc temp VFL.MET	V15-2054 A1-1 CASEWORK	1.00	1.00
40	VFL12022015.0040.raw	Blood Alc temp VFL.MET	V15-2056 A1-1 SAMPLES NOT	1.00	1.00
41	VFL12022015.0041.raw	Blood Alc temp VFL.MET	V15-2056 A1-1 INCLUDED	1.00	1.00
42	VFL12022015.0042.raw	Blood Alc temp VFL.MET	CCS DS 12/3/15	1.00	1.00
43	VFL12022015.0043.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
44	VFL12022015.0044.raw	Blood Alc temp VFL.MET	V15-2058 A1-1	1.00	1.00
45	VFL12022015.0045.raw	Blood Alc temp VFL.MET	V15-2058 A1-1	1.00	1.00
46	VFL12022015.0046.raw	Blood Alc temp VFL.MET	V15-2069 A1-1	1.00	1.00
47	VFL12022015.0047.raw	Blood Alc temp VFL.MET	V15-2069 A1-1	1.00	1.00
48	VFL12022015.0048.raw	Blood Alc temp VFL.MET	V15-2071 A1-2	1.00	1.00
49	VFL12022015.0049.raw	Blood Alc temp VFL.MET	V15-2071 A1-2	1.00	1.00
50	VFL12022015.0050.raw	Blood Alc temp VFL.MET	V15-2075 A1-1	1.00	1.00
51	VFL12022015.0051.raw	Blood Alc temp VFL.MET	V15-2075 A1-1	1.00	1.00
52	VFL12022015.0052.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
53	VFL12022015.0053.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
54	VFL12022015.0054.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
55	VFL12022015.0055.raw	Blood Alc temp VFL.MET	CCS RUN WITHIN 24H OF	1.00	1.00
56	VFL12022015.0056.raw	Blood Alc temp VFL.MET	AQ CALIBRATION	1.00	1.00
57	VFL12022015.0057.raw	Blood Alc temp VFL.MET	AQ DS 12/3/15	1.00	1.00
58	VFL12022015.0058.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
59	VFL12022015.0059.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00

15-25-100
~~15-25-100~~
DS 12/4/15

DS

~~32~~ 33
DS 12/4/15

File Name: C:\Methods\VFL12022015.CAL
Version: 7

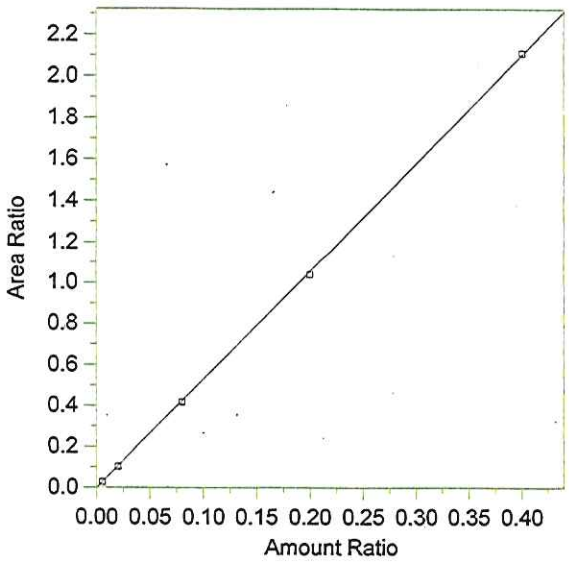
Creator:
Description:
Reason for change:

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

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

All levels are normal data points.

3 Ethanol



Expected retention time:	2.655 minutes
Search window:	0.1 minutes
Internal standard component:	7 (n-Propanol)
No retention time reference component	
Group number:	0
High alarm limit:	0
Low alarm limit:	0
Component constant:	0

Single peak quantification by area

Y = 5.261439 X + 0

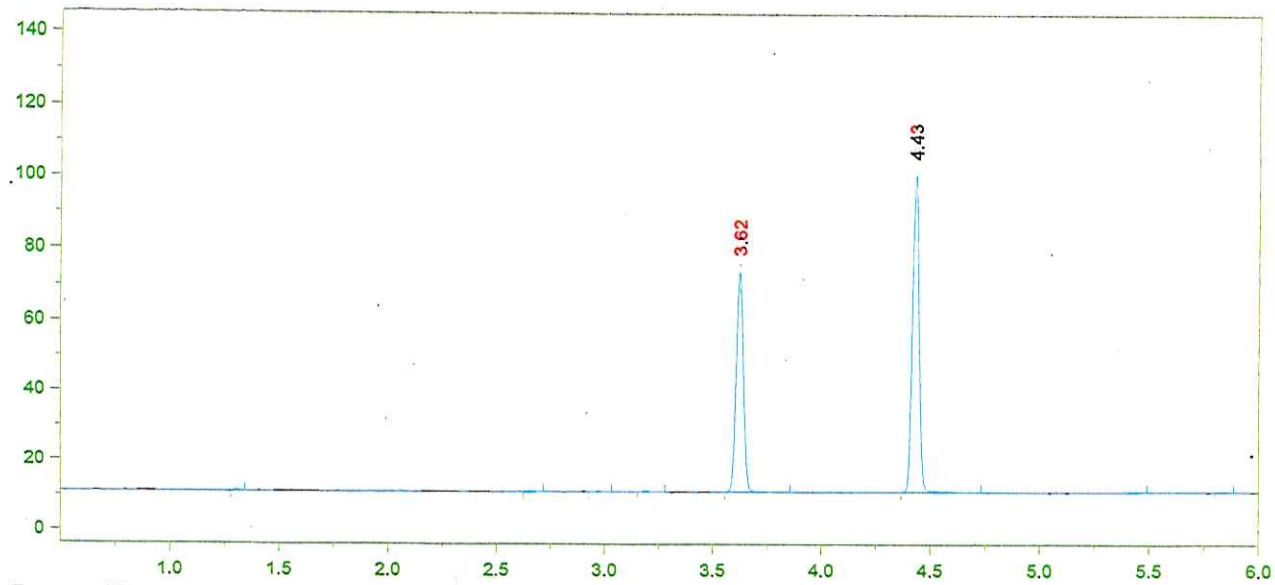
Linear fit with equal weighting, forced to origin

Coefficient of determination:	0.9998996
Average error:	1.698%
Average CF:	5.20364
RSD:	2.172%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source	Date and time
1	(0.078)	(85146)	–	–	0.078	85146	Manual	8/18/2015 8:39:13 AM
2	0.005	4890.157	978031.4	1.114	0.005	2.660026E-02	C:\Alcohol Data\VFL12022015\VFL12022015.0003.BND	12/2/2015 12:26:18 PM
3	0.02	19966.8	998340.1	-4.460	0.02	0.1005351	C:\Alcohol Data\VFL12022015\VFL12022015.0004.BND	12/2/2015 12:41:58 PM
4	0.08	83140.96	1039262	-1.234	0.08	0.4157212	C:\Alcohol Data\VFL12022015\VFL12022015.0005.BND	12/2/2015 12:57:45 PM
5	0.2	189491.9	947459.5	-1.297	0.2	1.03864	C:\Alcohol Data\VFL12022015\VFL12022015.0006.BND	12/2/2015 1:13:34 PM
6	0.4	382705.7	956764.2	0.385	0.4	2.11267	C:\Alcohol Data\VFL12022015\VFL12022015.0007.BND	12/2/2015 1:28:10 PM

15-25-120

3334
12/4/15

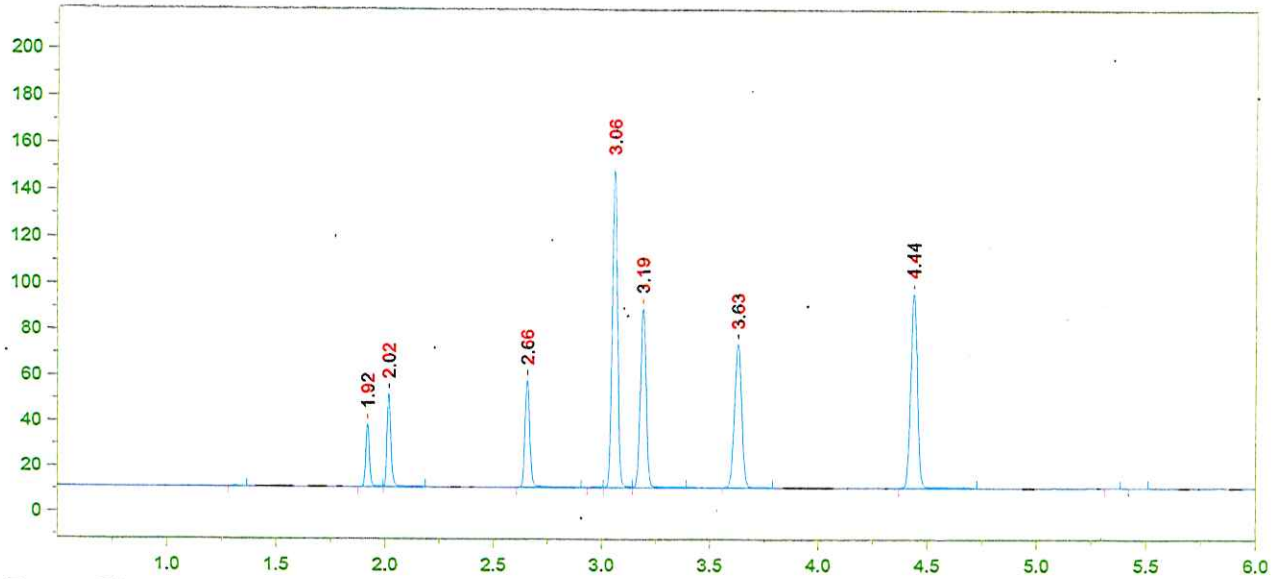


Format File Name = AlcoholVFL.FMT

Today's Date = 12/3/2015
Today's Time = 7:49:18 AM
Bound File Name = VFL12022015.0001.RAW
Sample Name = BLANK
Date Taken = 12/2/2015 11:54:10 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
5	3.62	t-Butanol	144314	0.9604
6	4.43	n-Propanol	190361	1.0000

15-25-100 DS 35 DS 12/4/15



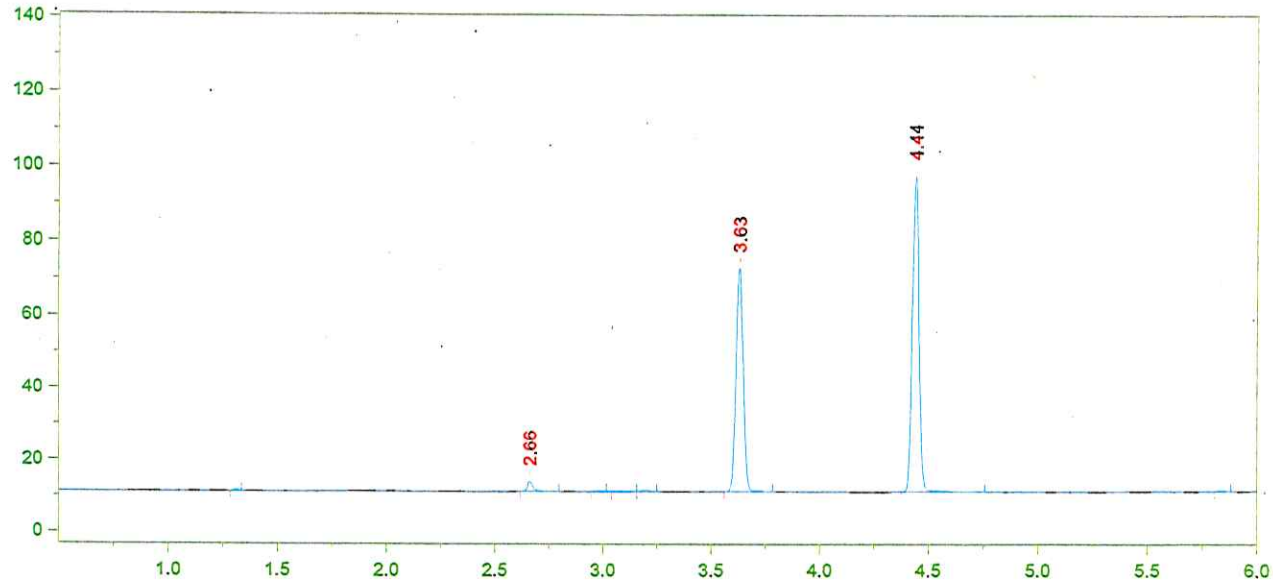
Format File Name = AlcoholVFL.FMT

Today's Date = 12/3/2015
Today's Time = 7:49:24 AM
Bound File Name = VFL12022015.0002.RAW
Sample Name = TMX
Date Taken = 12/2/2015 12:12:11 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	1.92	Acetaldehyde	32636	0.0686
4	2.02	Methanol	52049	0.1169
5	2.66	Ethanol	73173	0.0772
7	3.06	Acetone	234510	0.0612
8	3.19	Isopropanol	146926	0.0780
9	3.63	t-Butanol	145128	1.0208
10	4.44	n-Propanol	180111	1.0000

15-25-100

~~1536~~
12/4/15



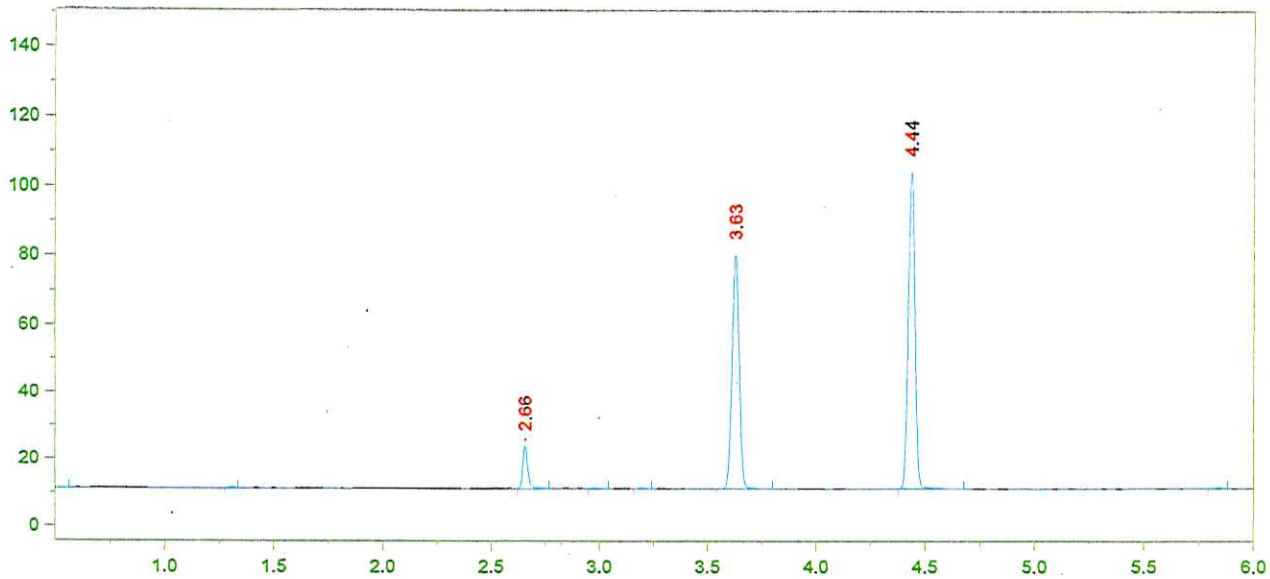
Format File Name = AlcoholVFL.FMT

Today's Date = 12/3/2015
Today's Time = 7:49:29 AM
Bound File Name = VFL12022015.0003.RAW
Sample Name = STD A
Date Taken = 12/2/2015 12:26:09 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.66	Ethanol	04890	0.0051
7	3.63	t-Butanol	142293	0.9806
8	4.44	n-Propanol	183839	1.0000

15-25-100

3637
12/4/15

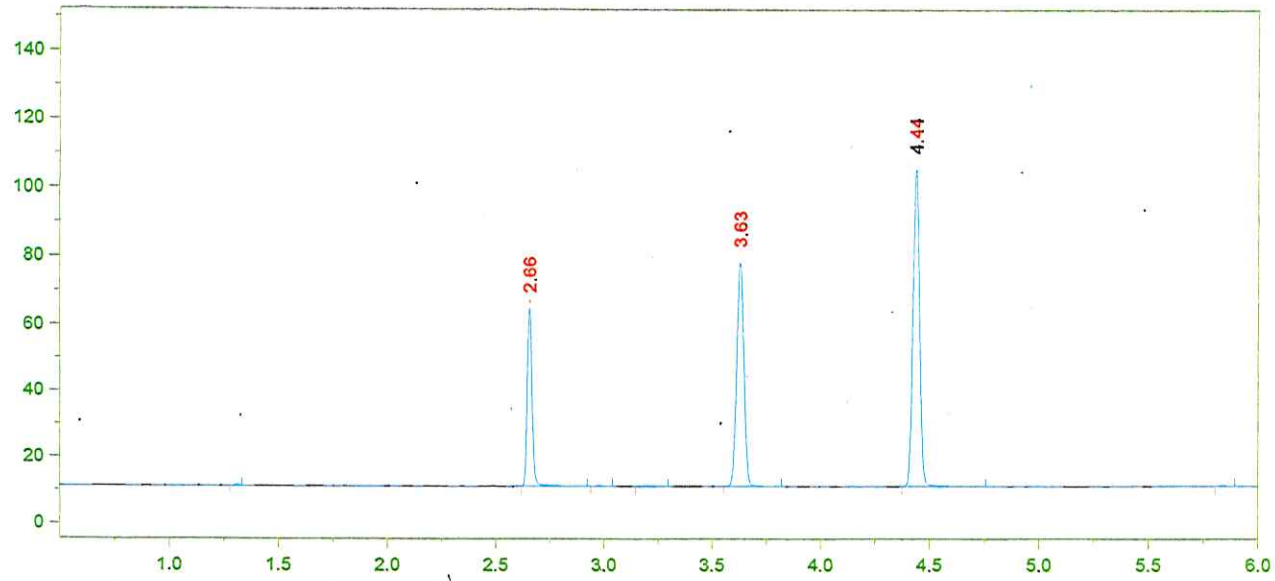


Format File Name = AlcoholVFL.FMT

Today's Date = 12/3/2015
Today's Time = 7:49:35 AM
Bound File Name = VFL12022015.0004.RAW
Sample Name = STD B
Date Taken = 12/2/2015 12:41:53 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.66	Ethanol	19967	0.0191
6	3.63	t-Butanol	158828	1.0131
7	4.44	n-Propanol	198605	1.0000

15-25-100 DS ~~8738~~ DS 12/14/15

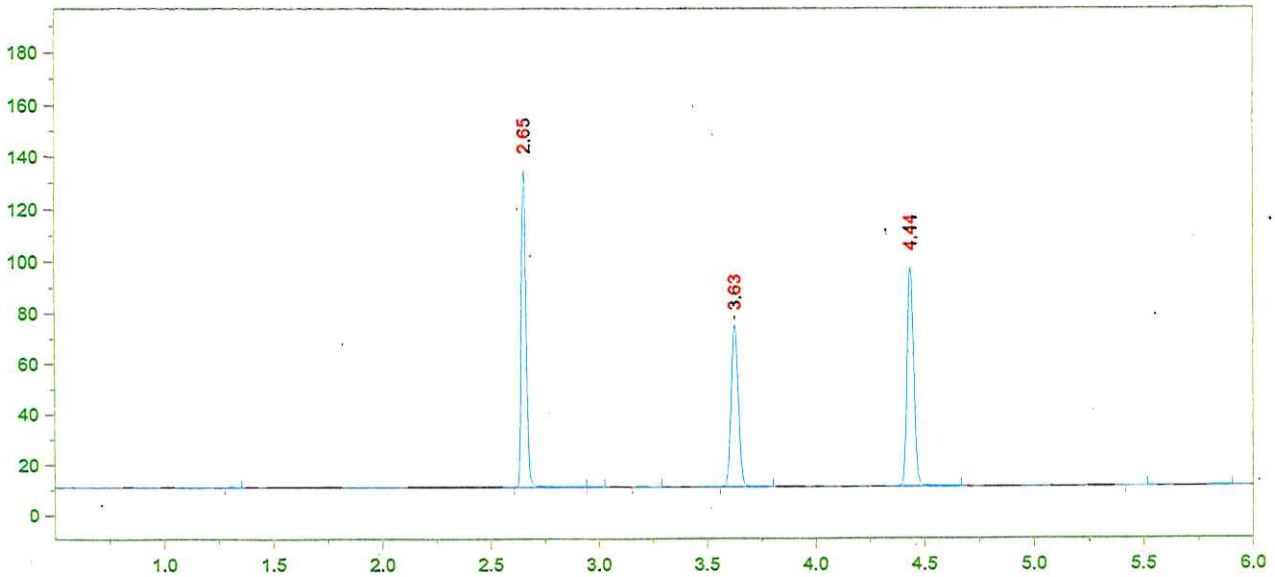


Format File Name = AlcoholVFL.FMT

Today's Date = 12/3/2015
Today's Time = 7:49:42 AM
Bound File Name = VFL12022015.0005.RAW
Sample Name = STD C
Date Taken = 12/2/2015 12:57:41 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.66	Ethanol	83141	0.0790
6	3.63	t-Butanol	154638	0.9796
7	4.44	n-Propanol	199992	1.0000

15-25-100 DS ~~38~~ 39 DS 12/4/15

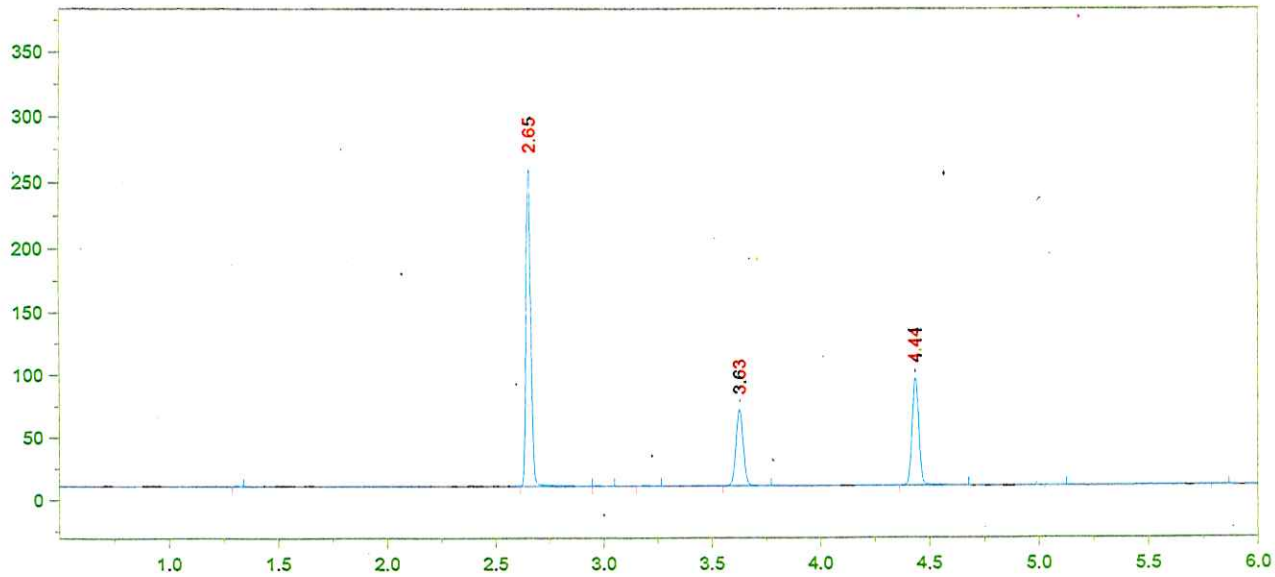


Format File Name = AlcoholVFL.FMT

Today's Date = 12/3/2015
Today's Time = 7:49:48 AM
Bound File Name = VFL12022015.0006.RAW
Sample Name = STD D
Date Taken = 12/2/2015 1:13:24 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	189492	0.1974
6	3.63	t-Butanol	147209	1.0222
7	4.44	n-Propanol	182442	1.0000

15-25-100 DG ~~39~~ 40 12/14/15

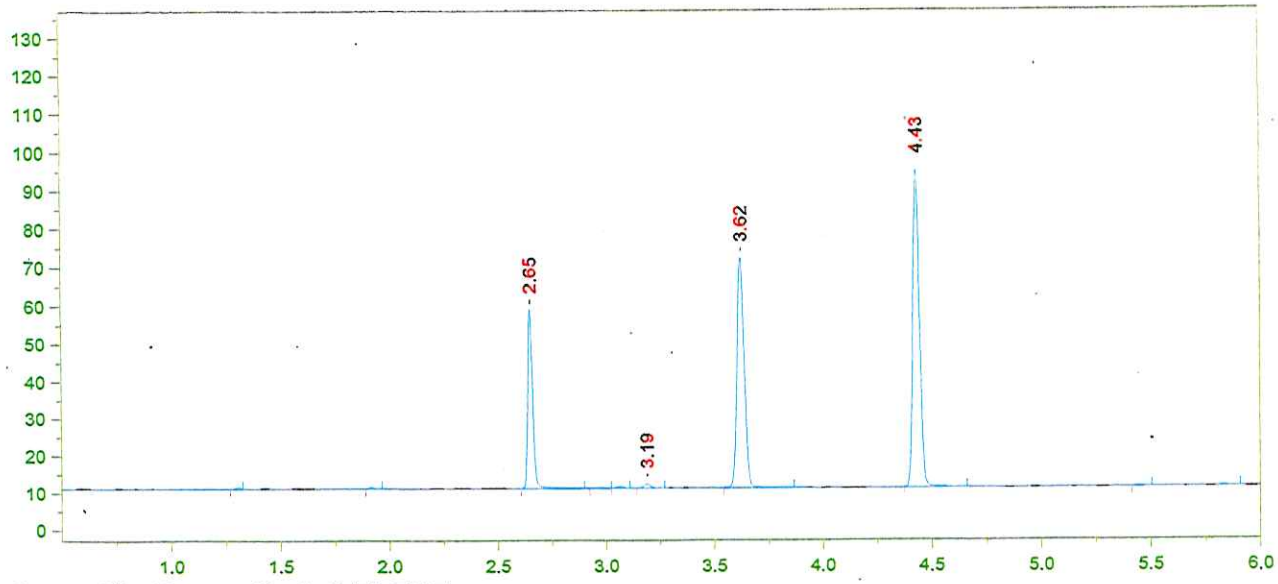


Format File Name = AlcoholVFL.FMT

Today's Date = 12/3/2015
Today's Time = 7:49:54 AM
Bound File Name = VFL12022015.0007.RAW
Sample Name = STD E
Date Taken = 12/2/2015 1:28:03 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	382706	0.4015
6	3.63	t-Butanol	140669	0.9838
7	4.44	n-Propanol	181148	1.0000

15-25-100 DS 404 12/4/15



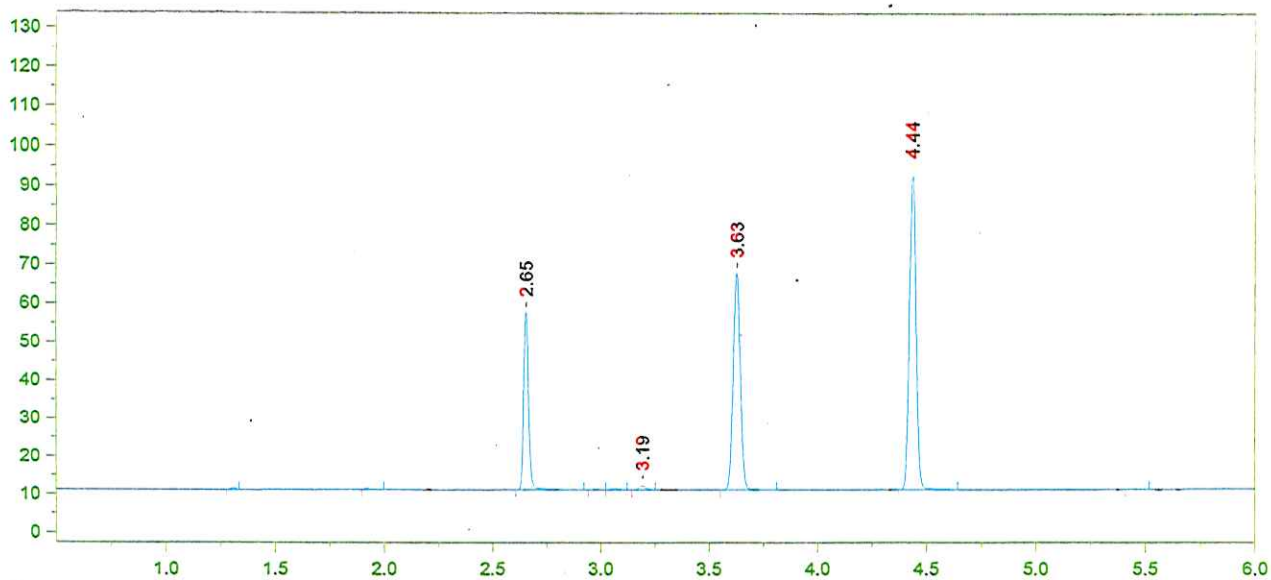
Format File Name = AlcoholVFL.FMT

Today's Date = 12/2/2015
Today's Time = 1:44:54 PM
Bound File Name = VFL12022015.0008.RAW
Sample Name = WB
Date Taken = 12/2/2015 1:44:49 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	74393	0.0793
6	3.19	Isopropanol	02206	<0.004
7	3.62	t-Butanol	141363	1.0038
8	4.43	n-Propanol	178400	1.0000

15-25-100

4442
12/4/15



Format File Name = AlcoholVFL.FMT

Today's Date = 12/2/2015
Today's Time = 1:59:00 PM
Bound File Name = VFL12022015.0009.RAW
Sample Name = WB
Date Taken = 12/2/2015 1:58:49 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	73077	0.0798
6	3.19	Isopropanol	02092	<0.004
7	3.63	t-Butanol	130513	0.9505
8	4.44	n-Propanol	173954	1.0000

Lot # 121090 DS 12/4/15

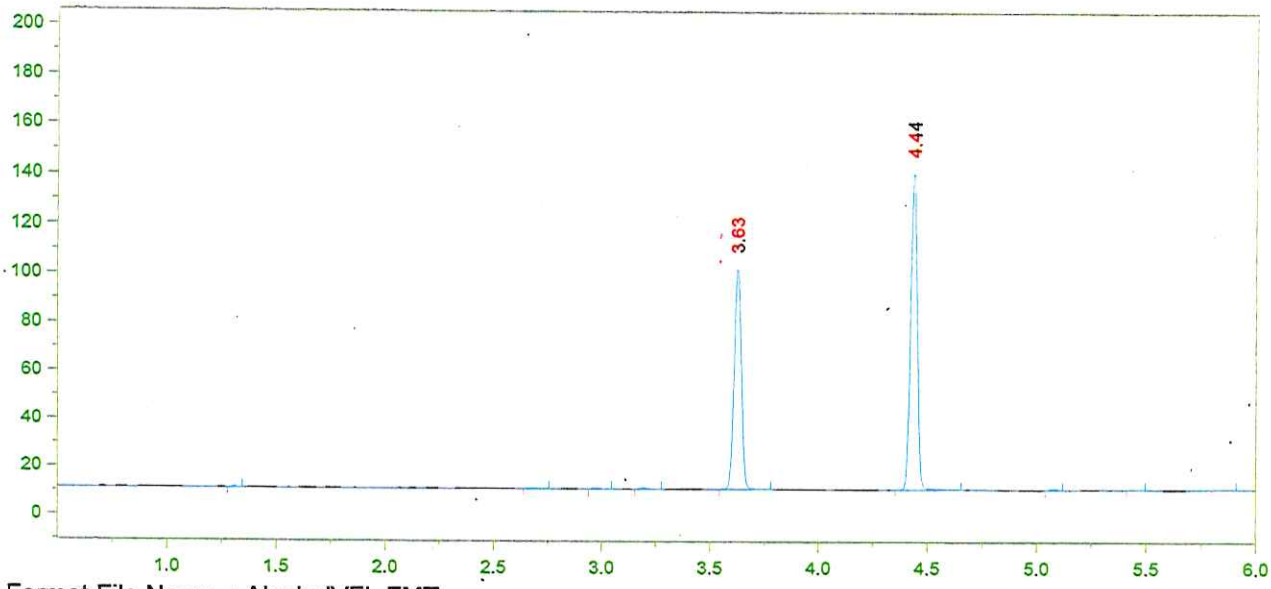
WB Meth: 0.0795 g/100 mm EtOH

±5%: 0.0755 - 0.0835

Recovery: $\frac{0.079}{0.080}$ = 98.7%

DS 12/3/15

15-25-100 DS 4243
DS 12/4/15

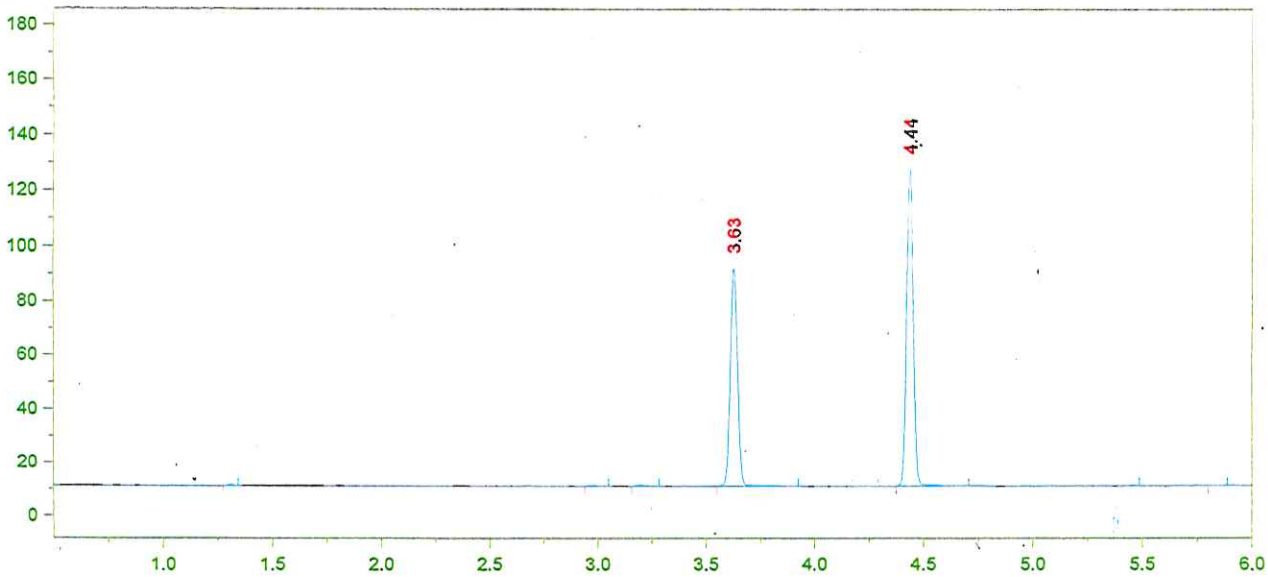


Format File Name = AlcoholVFL.FMT

Today's Date = 12/2/2015
Today's Time = 2:14:35 PM
Bound File Name = VFL12022015.0010.RAW
Sample Name = AQ
Date Taken = 12/2/2015 2:14:30 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
6	3.63	t-Butanol	211075	0.9705
7	4.44	n-Propanol	275542	1.0000

15-25-100 43-44



Format File Name = AlcoholVFL.FMT

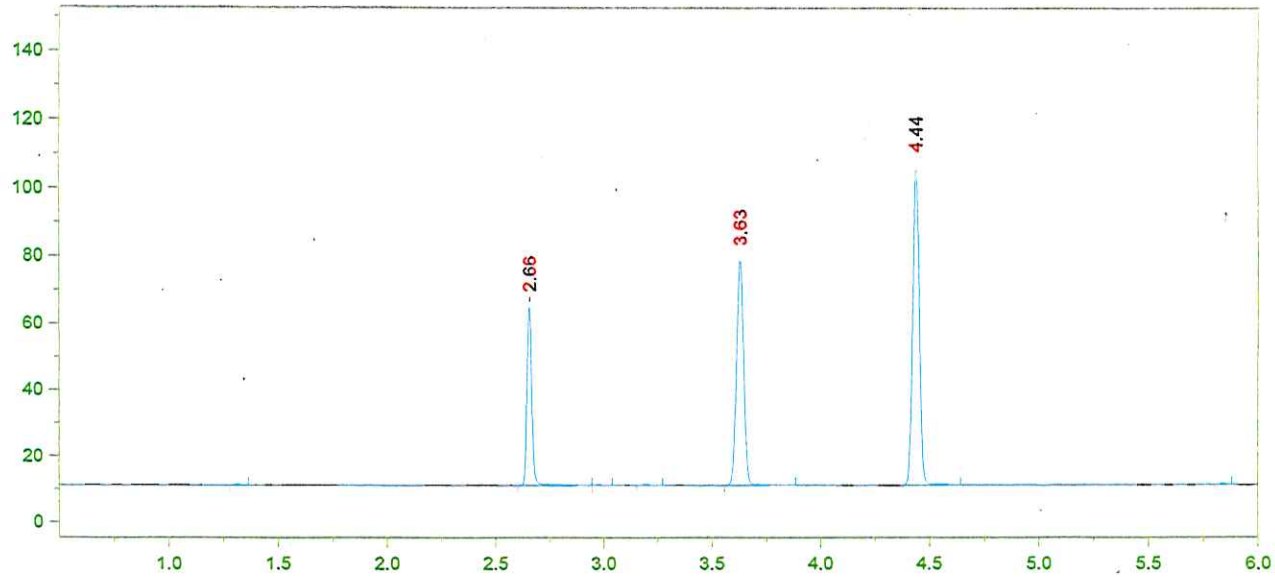
Today's Date = 12/2/2015
Today's Time = 2:30:14 PM
Bound File Name = VFL12022015.0011.RAW
Sample Name = AQ
Date Taken = 12/2/2015 2:30:11 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
5	3.63	t-Butanol	185946	0.9507
6	4.44	n-Propanol	247771	1.0000

PREPARATION ERROR; 2 ADDITIONAL VIALS PREPARED AND RUN 12/3/15.

DS 12/2/15

15-25-100 DS ~~44~~ 45 DS 12/14/15

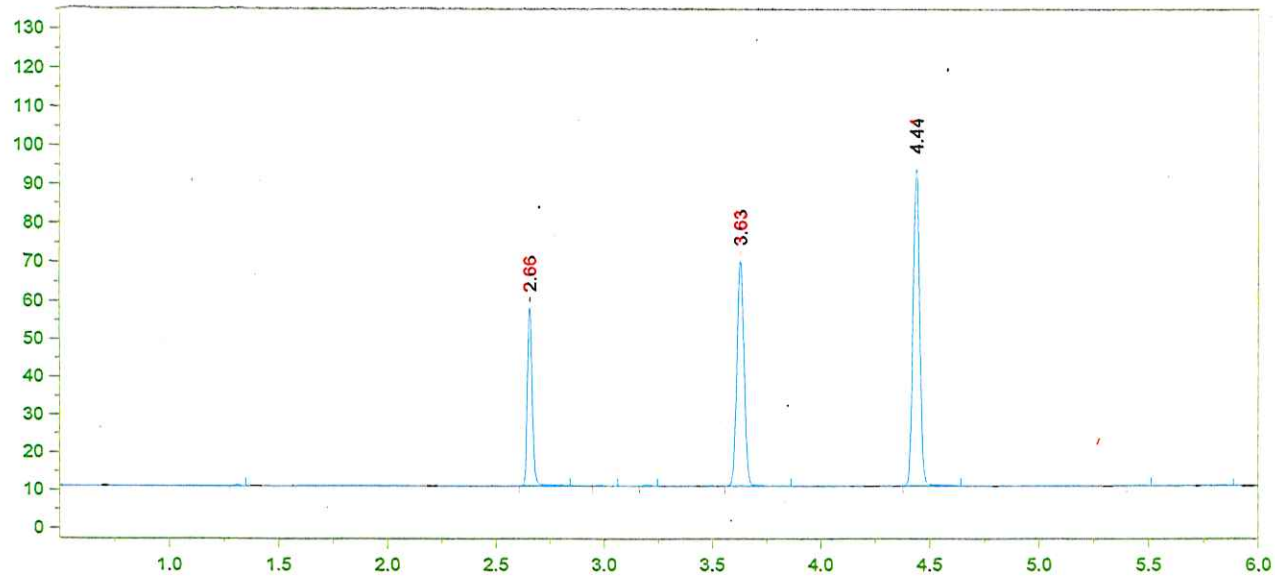


Format File Name = AlcoholVFL.FMT

Today's Date = 12/2/2015
Today's Time = 2:46:08 PM
Bound File Name = VFL12022015.0012.RAW
Sample Name = CCS
Date Taken = 12/2/2015 2:46:02 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	82785	0.0789
5	3.63	t-Butanol	155331	0.9868
6	4.44	n-Propanol	199418	1.0000

15-25-100 DS ~~45~~ 46 12/4/15



Format File Name = AlcoholVFL.FMT

Today's Date = 12/2/2015
Today's Time = 3:00:35 PM
Bound File Name = VFL12022015.0013.RAW
Sample Name = CCS
Date Taken = 12/2/2015 3:00:28 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	73045	0.0794
5	3.63	t-Butanol	136538	0.9895
6	4.44	n-Propanol	174817	1.0000

CCS Mdtv: 0.0791 gm/100 ml etoh

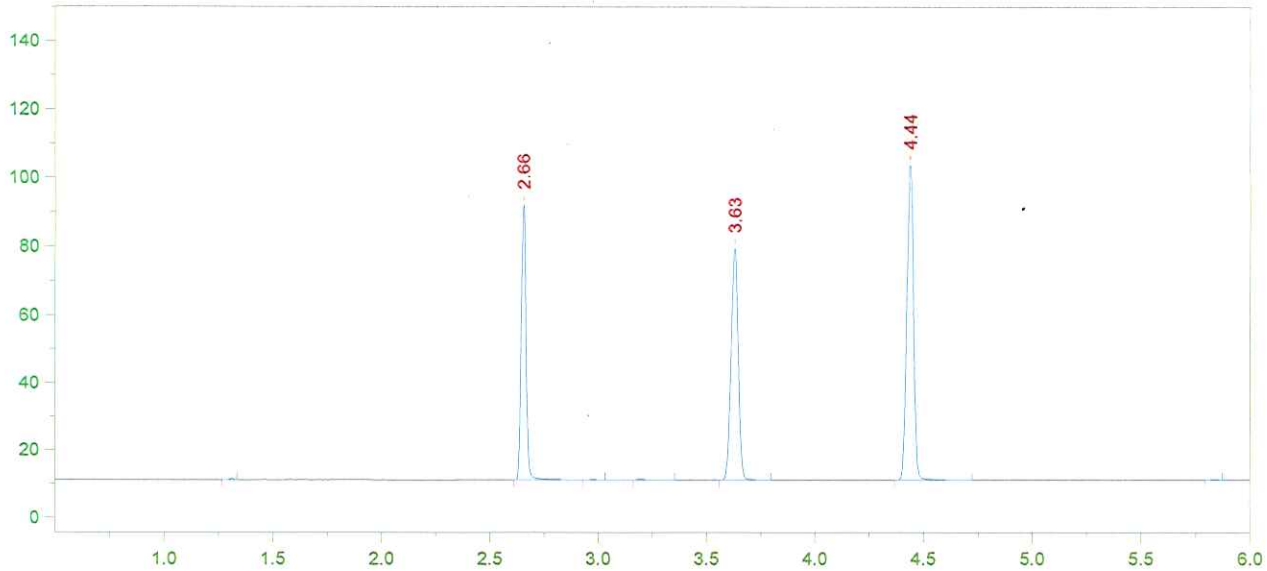
±10%: 0.0701 - 0.0830

Recovery: $\frac{0.079}{0.080}$ = 98.7%

[illegible]

15-25100

4647
12/14/15



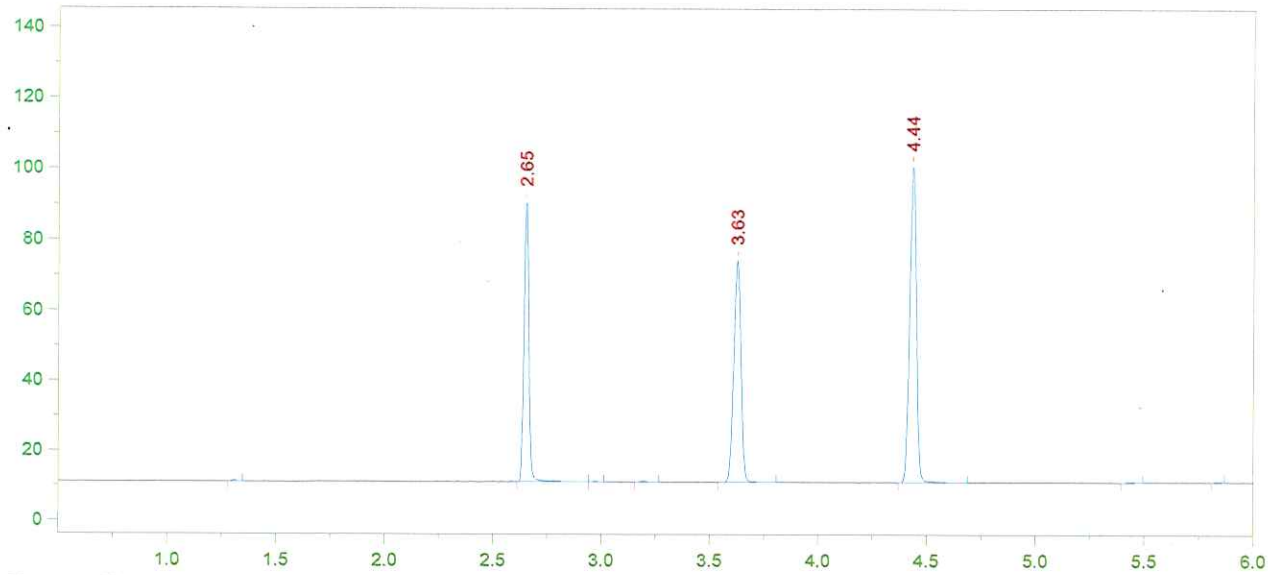
Format File Name = simsolnVFL.met.FMT

Today's Date = 12/2/2015
Today's Time = 3:15:53 PM
Bound File Name = VFL12022015.0014.RAW
Sample Name = 100 DP
Date Taken = 12/2/2015 3:15:44 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	126236	0.1210	0.0987
5	3.63	t-Butanol	157258	1.0044	0.8198
6	4.44	n-Propanol	198360	1.0000	0.8162

15-25-100

~~47~~ 48
12/4/15



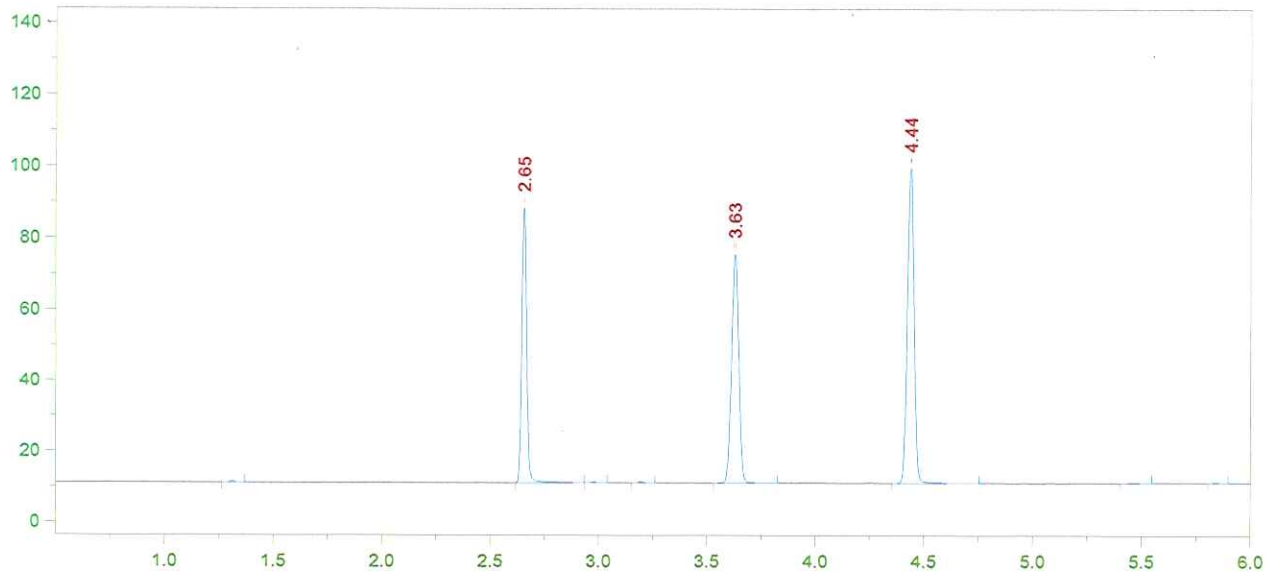
Format File Name = simsolnVFL.met.FMT

Today's Date = 12/2/2015
Today's Time = 3:30:52 PM
Bound File Name = VFL12022015.0015.RAW
Sample Name = 100 DP
Date Taken = 12/2/2015 3:30:42 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	123160	0.1225	0.1000
5	3.63	t-Butanol	145900	0.9673	0.7895
6	4.44	n-Propanol	191083	1.0000	0.8162

15-25-100

48-49
12/4/15



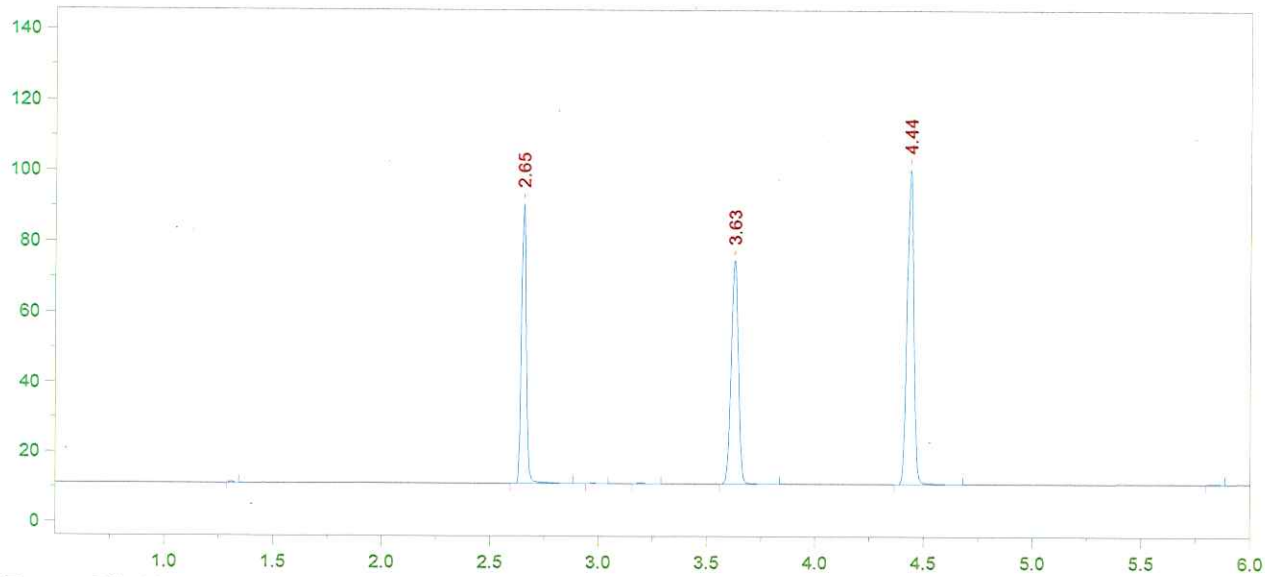
Format File Name = simsolnVFL.met.FMT

Today's Date = 12/2/2015
Today's Time = 3:47:27 PM
Bound File Name = VFL12022015.0016.RAW
Sample Name = 100 DP
Date Taken = 12/2/2015 3:47:18 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	120353	0.1215	0.0991
5	3.63	t-Butanol	148865	1.0015	0.8174
6	4.44	n-Propanol	188305	1.0000	0.8162

15-25-100

~~49.50~~
12/4/15



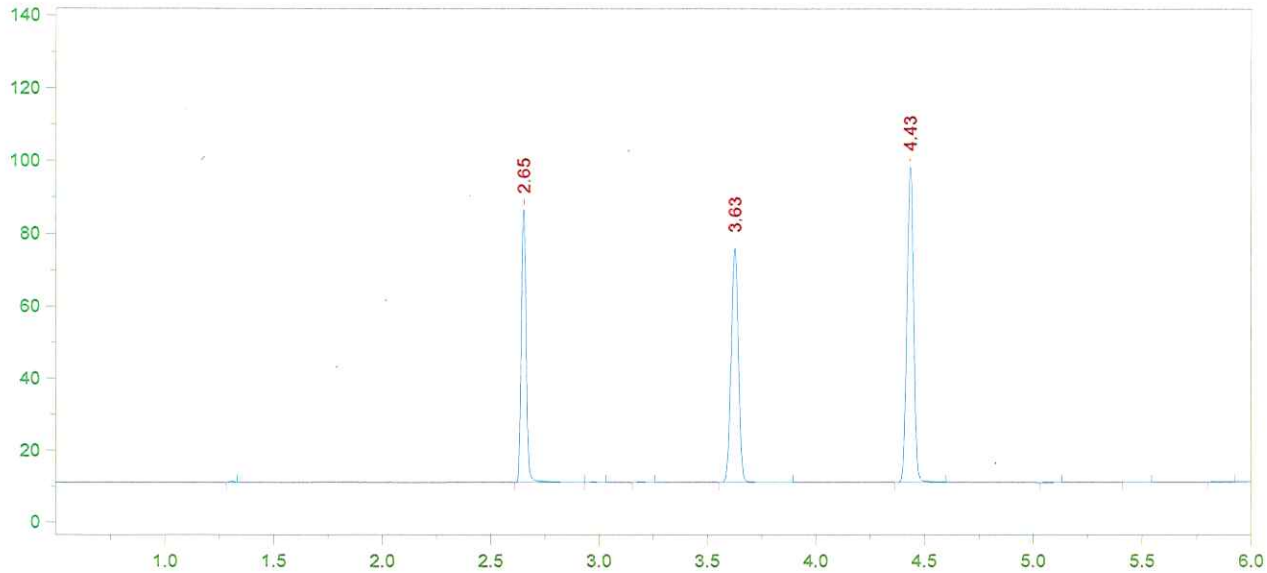
Format File Name = simsolnVFL.met.FMT

Today's Date = 12/2/2015
Today's Time = 4:01:59 PM
Bound File Name = VFL12022015.0017.RAW
Sample Name = 100 DP
Date Taken = 12/2/2015 4:01:48 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
3	2.65	Ethanol	122819	0.1230	0.1004
6	3.63	t-Butanol	147893	0.9871	0.8057
7	4.44	n-Propanol	189801	1.0000	0.8162

15-25-100

~~50~~ 51
12/4/15

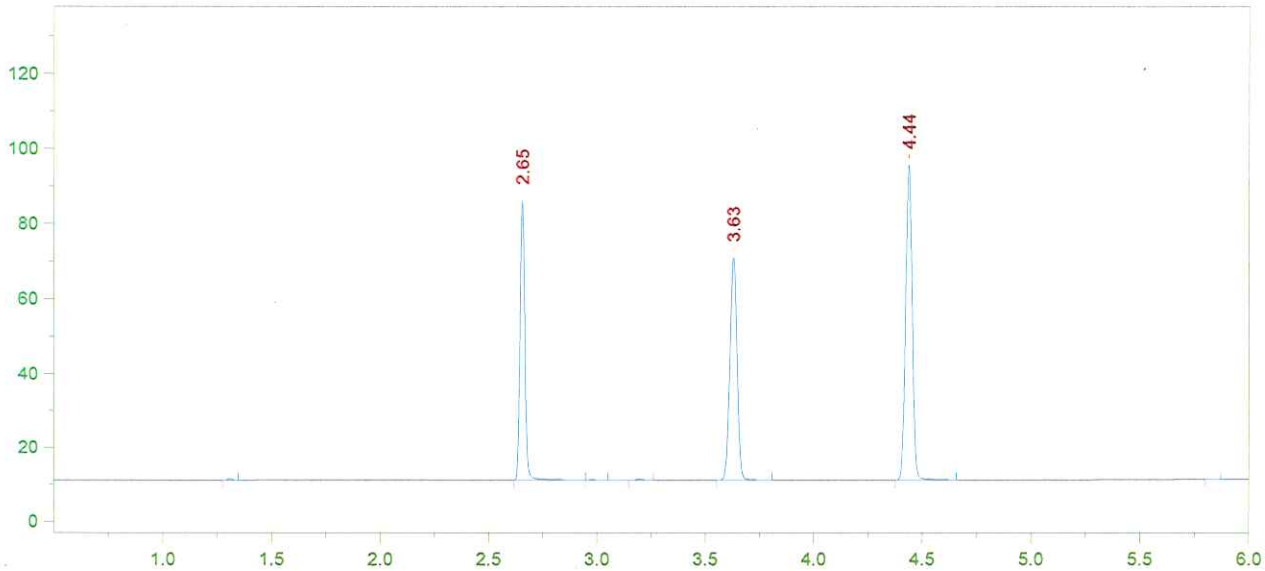


Format File Name = simsolnVFL.met.FMT

Today's Date = 12/2/2015
Today's Time = 4:18:52 PM
Bound File Name = VFL12022015.0018.RAW
Sample Name = 100 DP
Date Taken = 12/2/2015 4:18:45 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
3	2.65	Ethanol	117690	0.1210	0.0987
6	3.63	t-Butanol	150120	1.0284	0.8394
7	4.43	n-Propanol	184934	1.0000	0.8162

15-25-100 DS 5+52 12/14/15



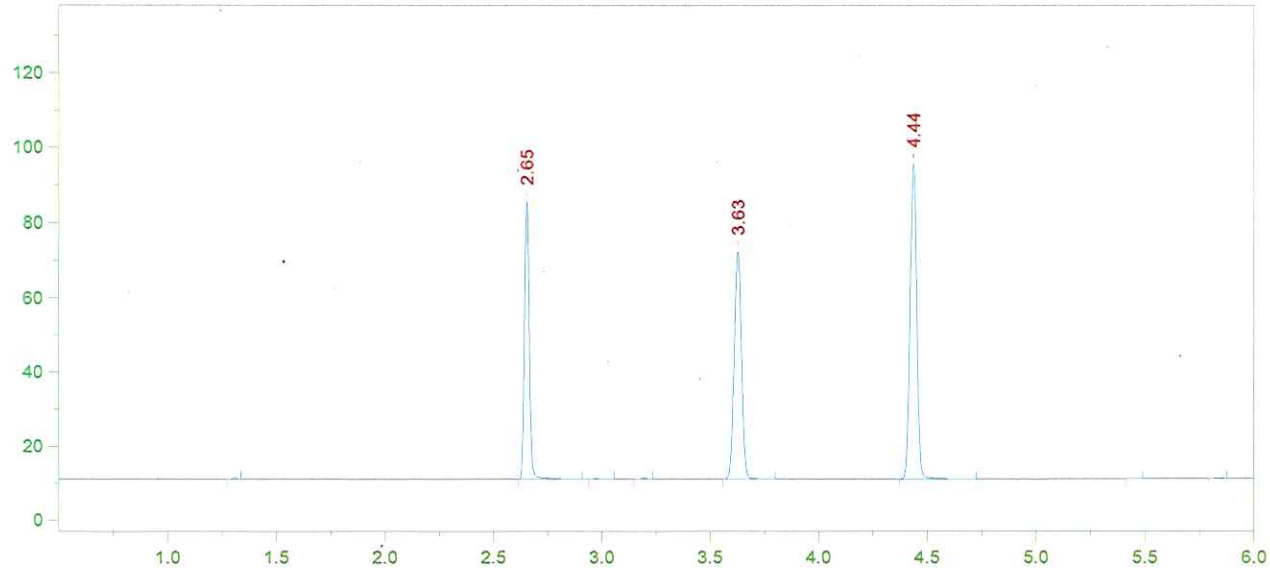
Format File Name = simsolnVFL.met.FMT

Today's Date = 12/2/2015
Today's Time = 4:32:23 PM
Bound File Name = VFL12022015.0019.RAW
Sample Name = 100 DP
Date Taken = 12/2/2015 4:32:20 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
3	2.65	Ethanol	116366	0.1235	0.1008
6	3.63	t-Butanol	138142	0.9772	0.7976
7	4.44	n-Propanol	179092	1.0000	0.8162

15-25-100

DG 0203 12/14/15

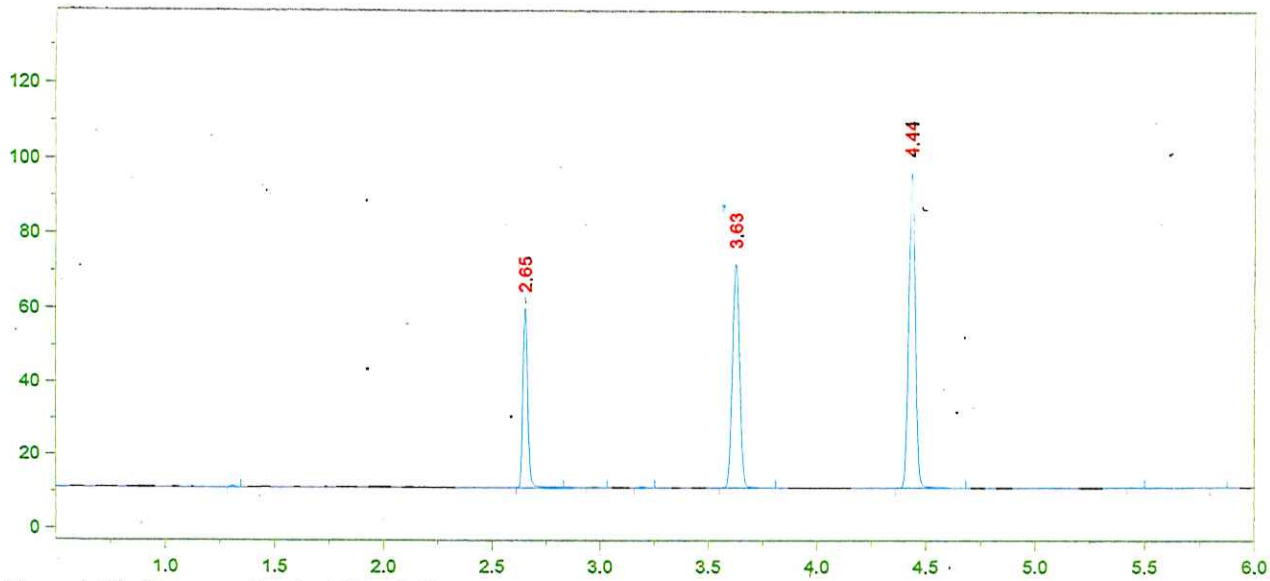


Format File Name = simsolnVFL.met.FMT

Today's Date = 12/2/2015
Today's Time = 4:50:13 PM
Bound File Name = VFL12022015.0020.RAW
Sample Name = 100 DP
Date Taken = 12/2/2015 4:50:09 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
3	2.65	Ethanol	114785	0.1217	0.0994
6	3.63	t-Butanol	142259	1.0057	0.8209
7	4.44	n-Propanol	179192	1.0000	0.8162

15-25-100 ~~5354~~ 12/8/15



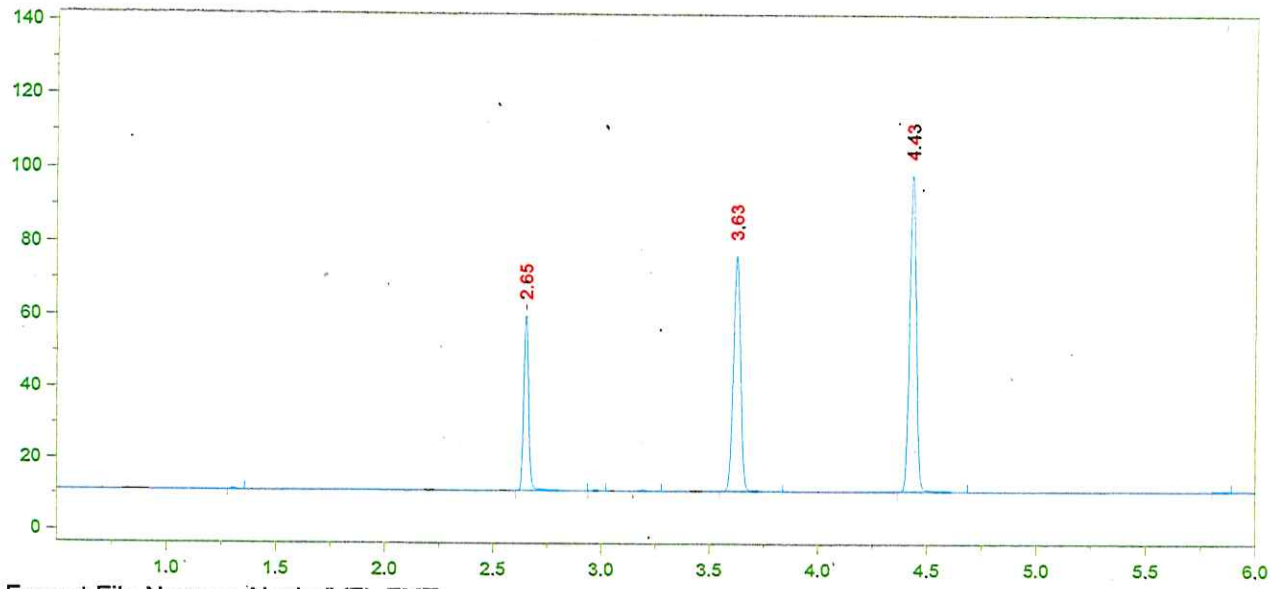
Format File Name = AlcoholVFL.FMT

Today's Date = 12/2/2015
Today's Time = 5:04:16 PM
Bound File Name = VFL12022015.0021.RAW
Sample Name = CCS
Date Taken = 12/2/2015 5:04:07 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	75704	0.0797
6	3.63	t-Butanol	140419	0.9851
7	4.44	n-Propanol	180579	1.0000

15-25100

12/14/15



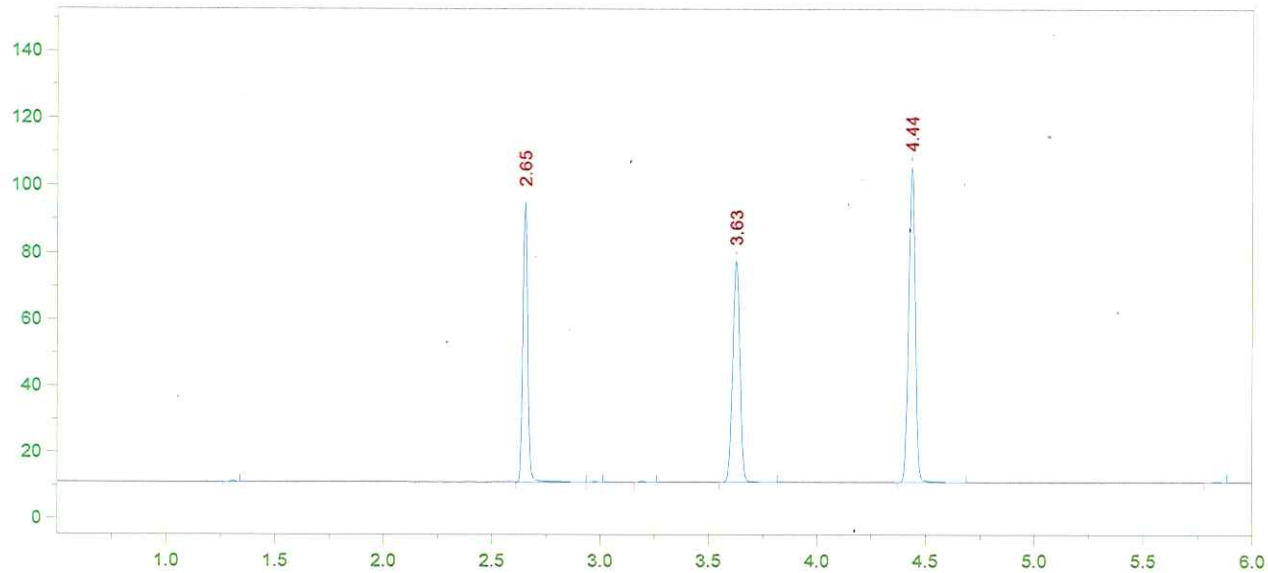
Format File Name = AlcoholVFL.FMT

Today's Date = 12/2/2015
Today's Time = 5:21:40 PM
Bound File Name = VFL12022015.0022.RAW
Sample Name = CCS
Date Taken = 12/2/2015 5:21:36 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	76431	0.0780
6	3.63	t-Butanol	151033	1.0276
7	4.43	n-Propanol	186205	1.0000

CCS mean: 0.0788 g/100 ml EtOH
±SE: 0.0748 - 0.0827
Recovery: 0.079 / 0.080 = 98.7%
12/3/15

15-25-100

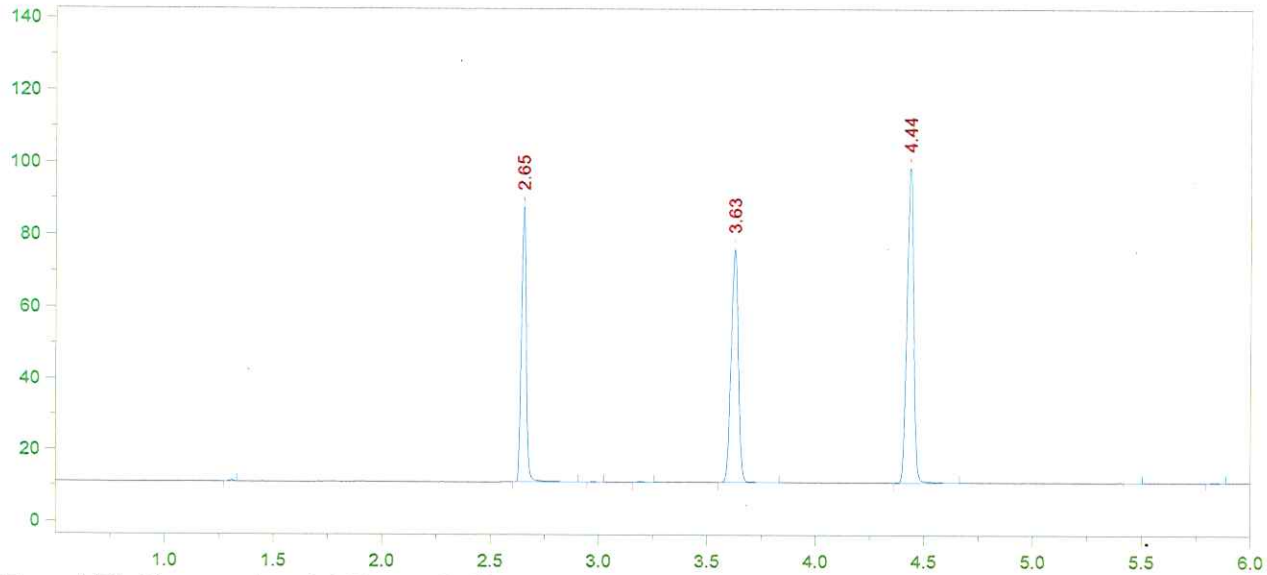


Format File Name = simsolnVFL.met.FMT

Today's Date = 12/2/2015
Today's Time = 5:35:35 PM
Bound File Name = VFL12022015.0023.RAW
Sample Name = 100 JD
Date Taken = 12/2/2015 5:35:29 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	129156	0.1228	0.1002
5	3.63	t-Butanol	153641	0.9737	0.7947
6	4.44	n-Propanol	199908	1.0000	0.8162

15-29-100

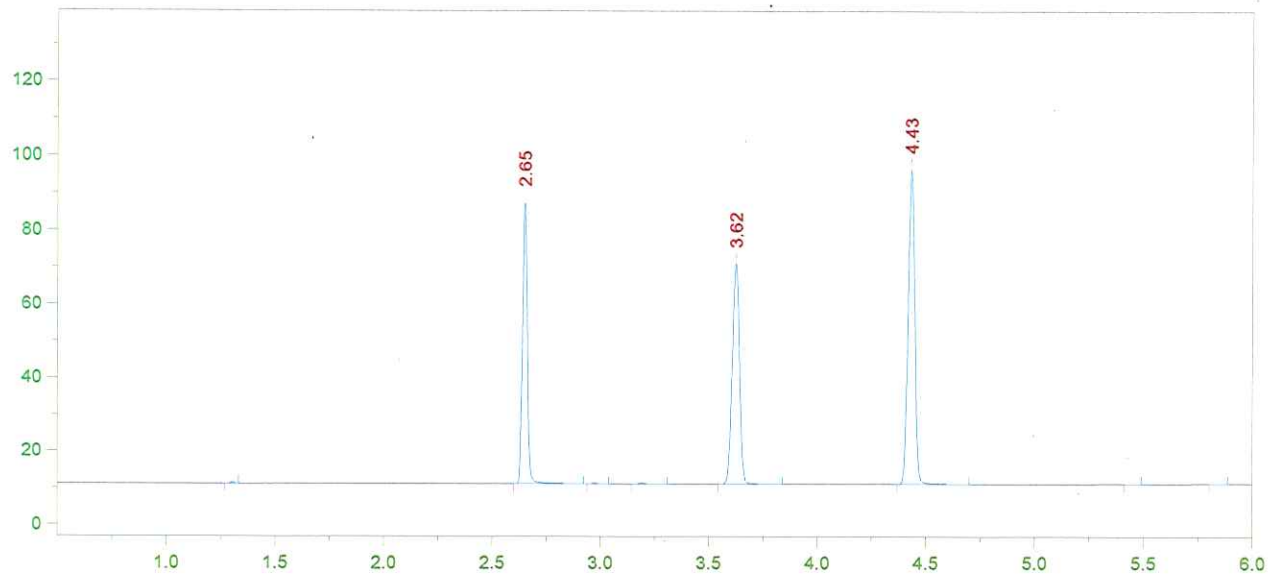


Format File Name = simsolnVFL.met.FMT

Today's Date = 12/2/2015
Today's Time = 5:53:05 PM
Bound File Name = VFL12022015.0024.RAW
Sample Name = 100 JD
Date Taken = 12/2/2015 5:53:00 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
3	2.65	Ethanol	118584	0.1206	0.0984
6	3.63	t-Butanol	150465	1.0198	0.8324
7	4.44	n-Propanol	186909	1.0000	0.8162

15-25-100 ~~57~~ 58

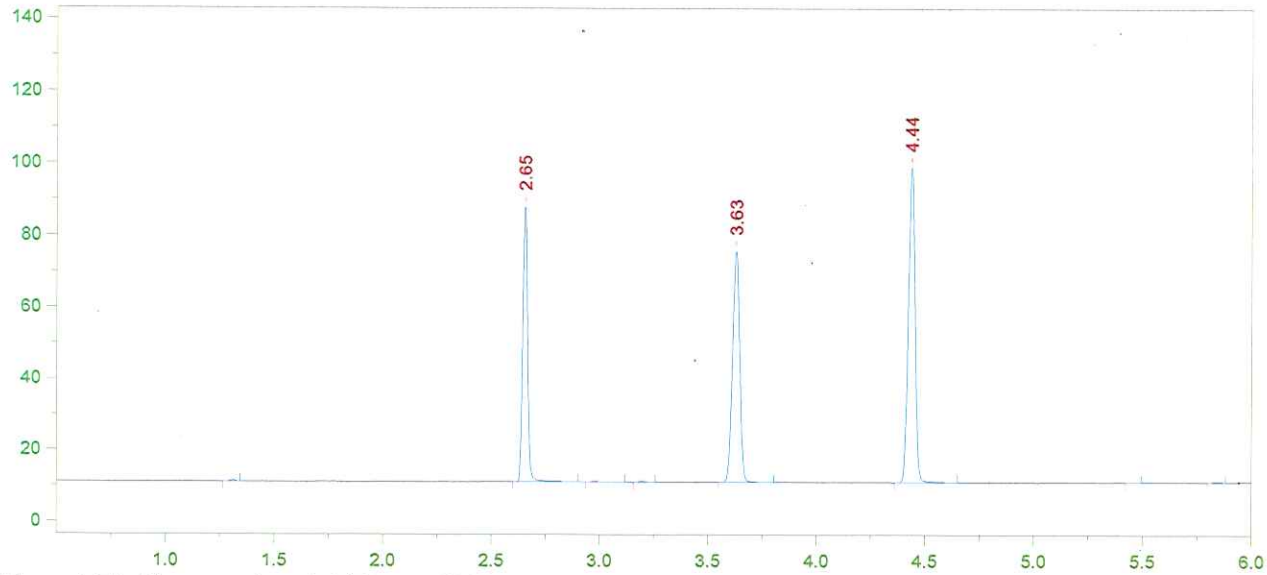


Format File Name = simsolnVFL.met.FMT

Today's Date = 12/2/2015
Today's Time = 6:06:52 PM
Bound File Name = VFL12022015.0025.RAW
Sample Name = 100 JD
Date Taken = 12/2/2015 6:06:44 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
3	2.65	Ethanol	117251	0.1231	0.1005
6	3.62	t-Butanol	138957	0.9723	0.7936
7	4.43	n-Propanol	181058	1.0000	0.8162

15-25-100 12/4/15

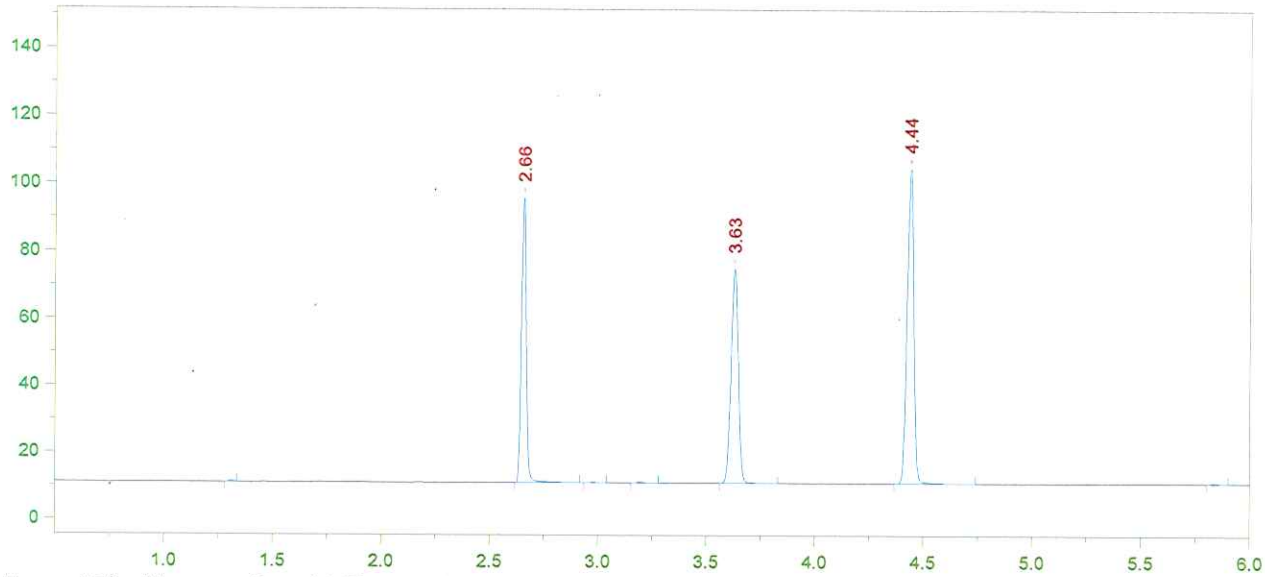


Format File Name = simsolnVFL.met.FMT

Today's Date = 12/2/2015
Today's Time = 6:24:36 PM
Bound File Name = VFL12022015.0026.RAW
Sample Name = 100 JD
Date Taken = 12/2/2015 6:24:27 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
3	2.65	Ethanol	119221	0.1214	0.0991
6	3.63	t-Butanol	149272	1.0132	0.8269
7	4.44	n-Propanol	186650	1.0000	0.8162

15-245-100

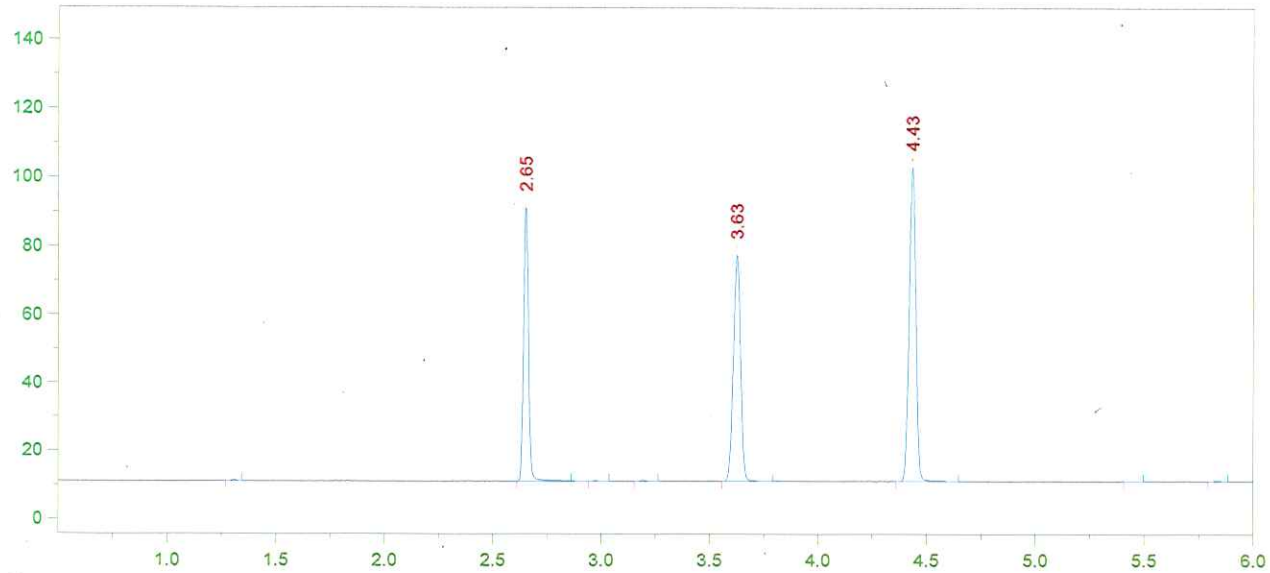


Format File Name = simsolnVFL.met.FMT

Today's Date = 12/2/2015
Today's Time = 6:39:29 PM
Bound File Name = VFL12022015.0027.RAW
Sample Name = 100 JD
Date Taken = 12/2/2015 6:39:20 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	131050	0.1247	0.1018
5	3.63	t-Butanol	147942	0.9383	0.7659
6	4.44	n-Propanol	199737	1.0000	0.8162

15-25-100 JS 6061 12/2/2015



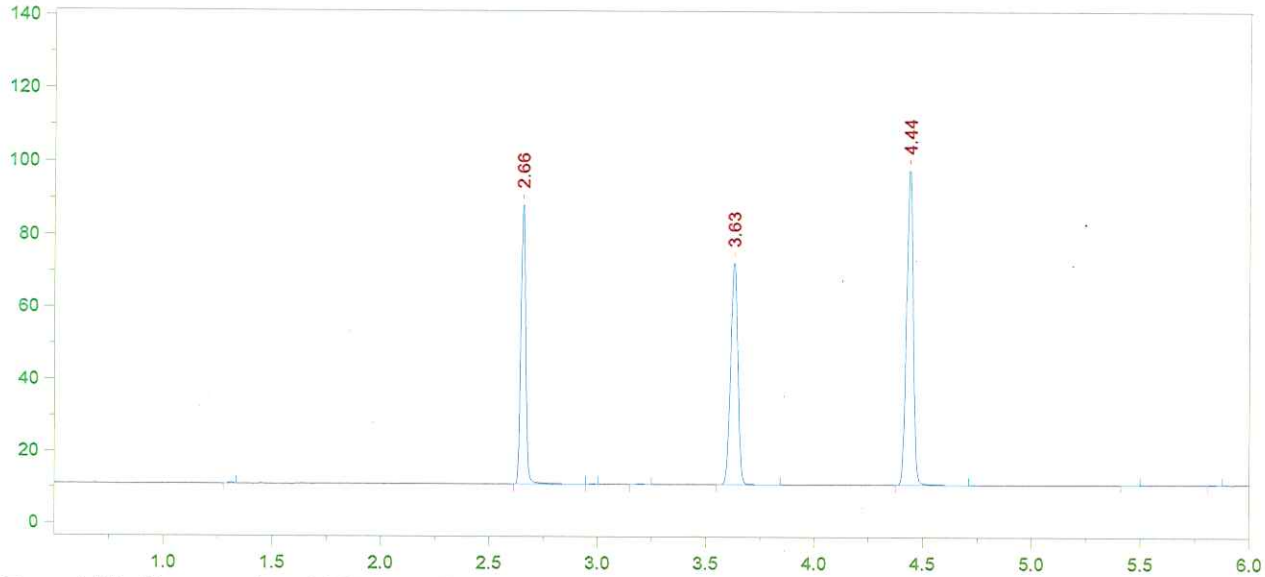
Format File Name = simsolnVFL.met.FMT

Today's Date = 12/2/2015
Today's Time = 6:55:56 PM
Bound File Name = VFL12022015.0028.RAW
Sample Name = 100 JD
Date Taken = 12/2/2015 6:55:49 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
3	2.65	Ethanol	124803	0.1215	0.0992
6	3.63	t-Butanol	153108	0.9934	0.8108
7	4.43	n-Propanol	195257	1.0000	0.8162

15-25-100 DS

~~G+~~ G2
DS 12/4/15

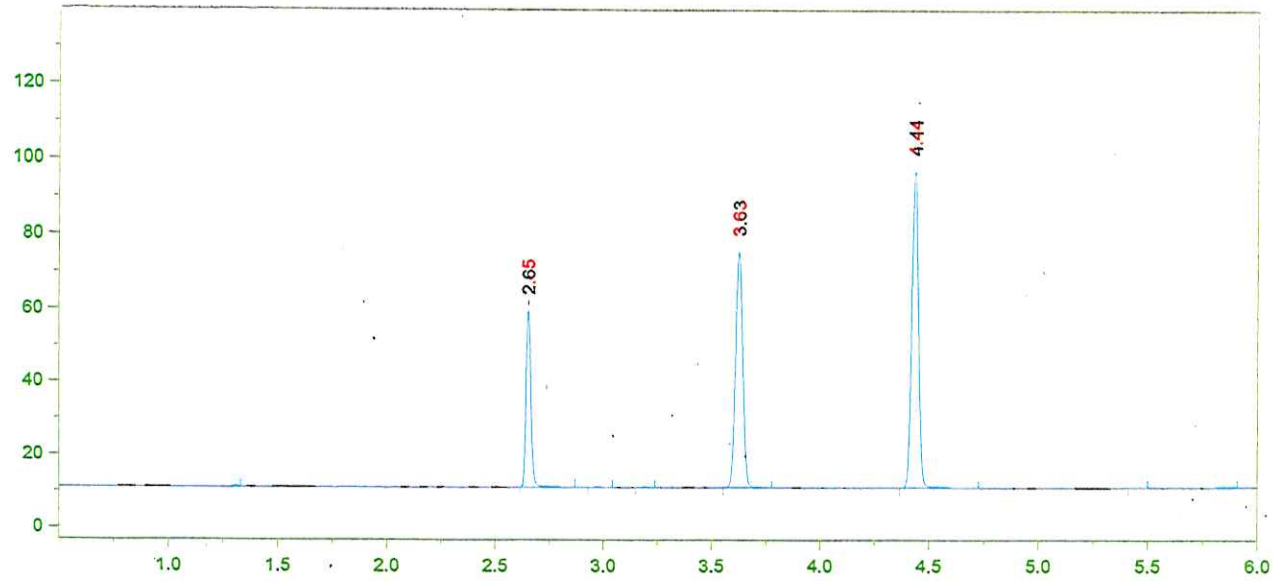


Format File Name = simsolnVFL.met.FMT

Today's Date = 12/2/2015
Today's Time = 7:10:00 PM
Bound File Name = VFL12022015.0029.RAW
Sample Name = 100 JD
Date Taken = 12/2/2015 7:09:55 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
3	2.66	Ethanol	119713	0.1229	0.1003
6	3.63	t-Butanol	142176	0.9732	0.7944
7	4.44	n-Propanol	185070	1.0000	0.8162

15-25-100 JP ~~62~~ 63 12/11/15

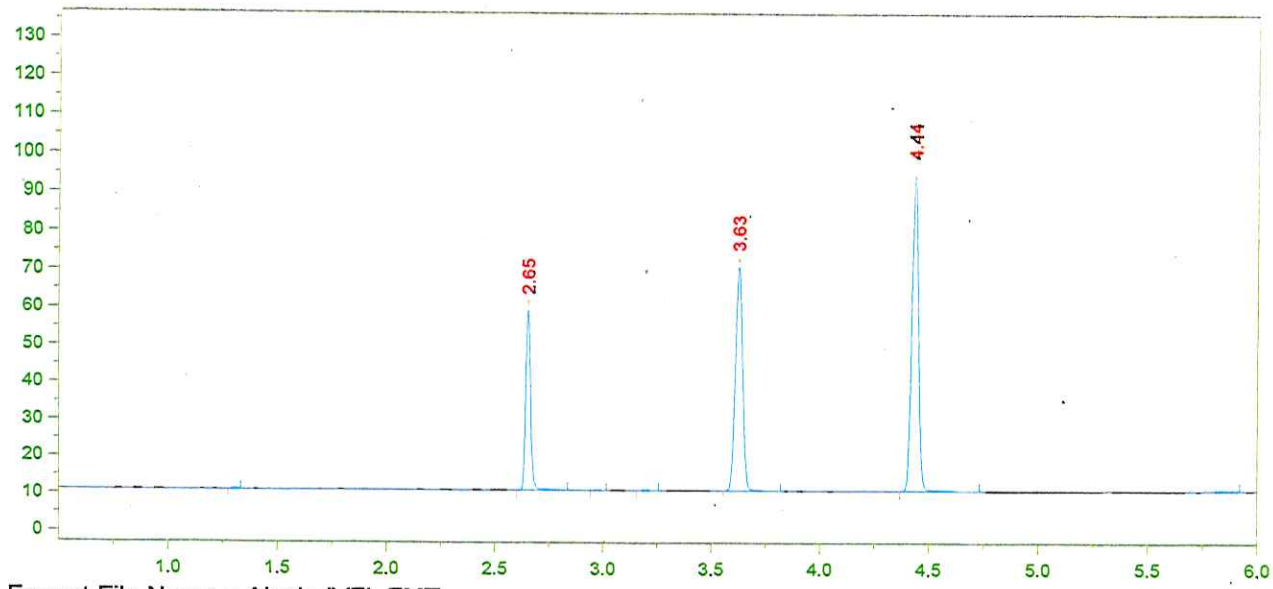


Format File Name = AlcoholVFL.FMT

Today's Date = 12/2/2015
Today's Time = 7:27:23 PM
Bound File Name = VFL12022015.0030.RAW
Sample Name = CCS
Date Taken = 12/2/2015 7:27:14 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	74996	0.0780
6	3.63	t-Butanol	148169	1.0267
7	4.44	n-Propanol	182823	1.0000

15-25-100 DS 6364
DS 12/14/15



Format File Name = AlcoholVFL.FMT

Today's Date = 12/2/2015
Today's Time = 7:41:00 PM
Bound File Name = VFL12022015.0031.RAW
Sample Name = CCS
Date Taken = 12/2/2015 7:40:56 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

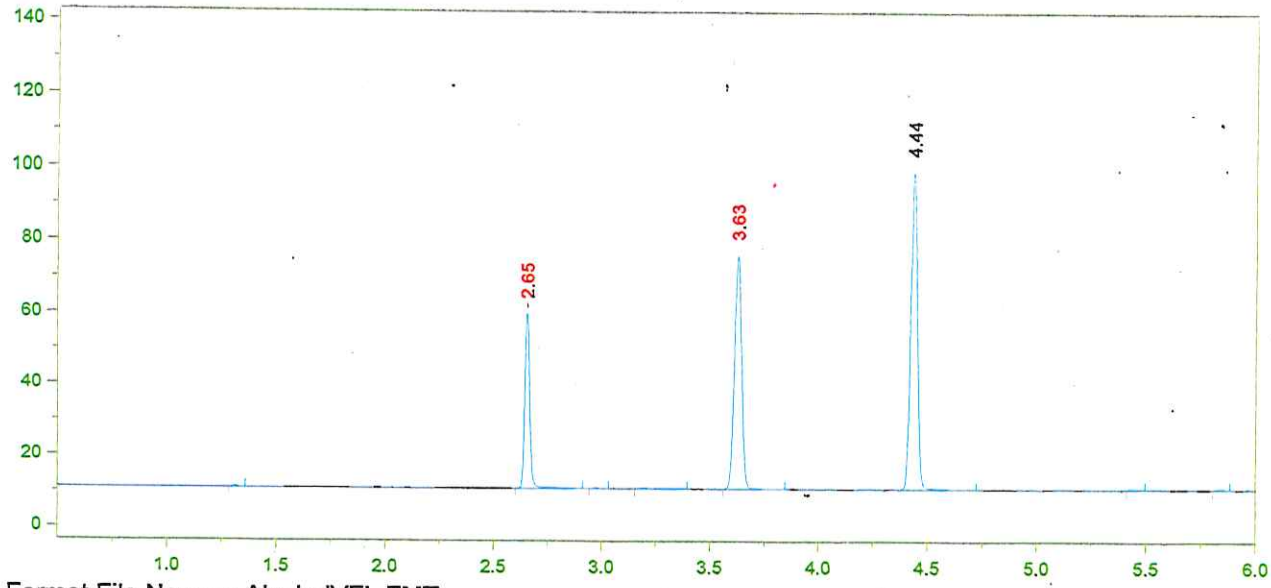
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	74929	0.0799
6	3.63	t-Butanol	138300	0.9831
7	4.44	n-Propanol	178216	1.0000

CCS MEAN: 0.0789 g/100 ml
Range: 0.0749 - 0.0828

Recovery: $\frac{0.079}{0.080}$ = 98.7%

12/2/15

15-25-100 6465 12/2/15

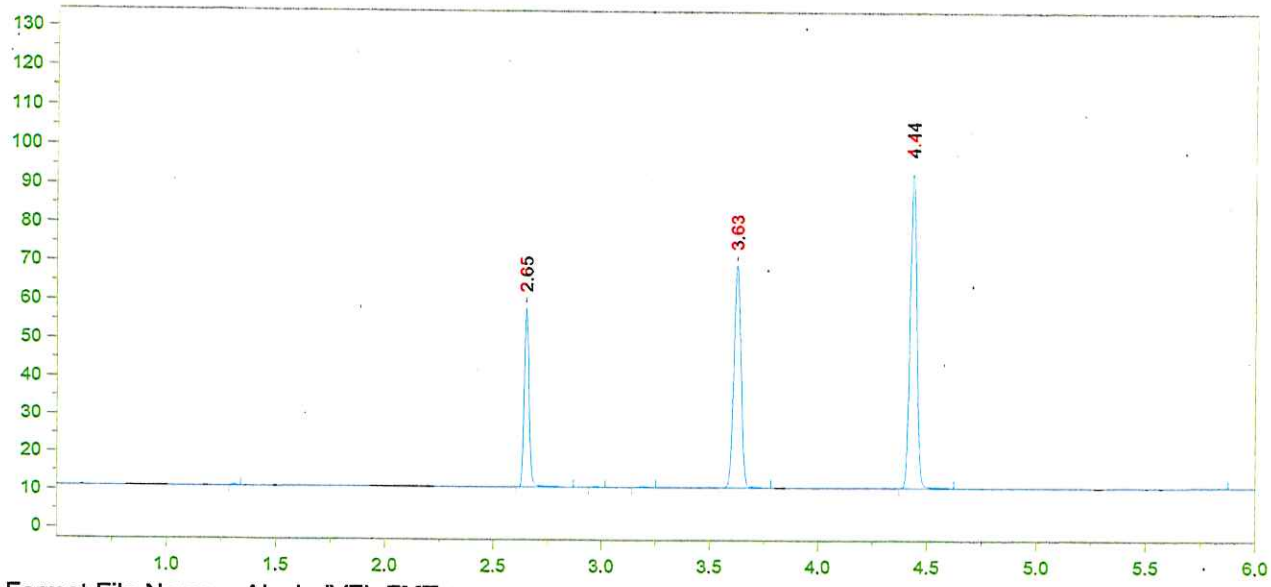


Format File Name = AlcoholVFL.FMT

Today's Date = 12/2/2015
Today's Time = 10:35:57 PM
Bound File Name = VFL12022015.0042.RAW
Sample Name = CCS
Date Taken = 12/2/2015 10:35:50 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	76757	0.0783
6	3.63	t-Butanol	150708	1.0249
7	4.44	n-Propanol	186279	1.0000

15-25-400 ~~65~~ 66
02/01/15



Format File Name = AlcoholVFL.FMT

Today's Date = 12/2/2015
Today's Time = 10:49:37 PM
Bound File Name = VFL12022015.0043.RAW
Sample Name = CCS
Date Taken = 12/2/2015 10:49:32 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	73094	0.0798
6	3.63	t-Butanol	134551	0.9789
7	4.44	n-Propanol	174128	1.0000

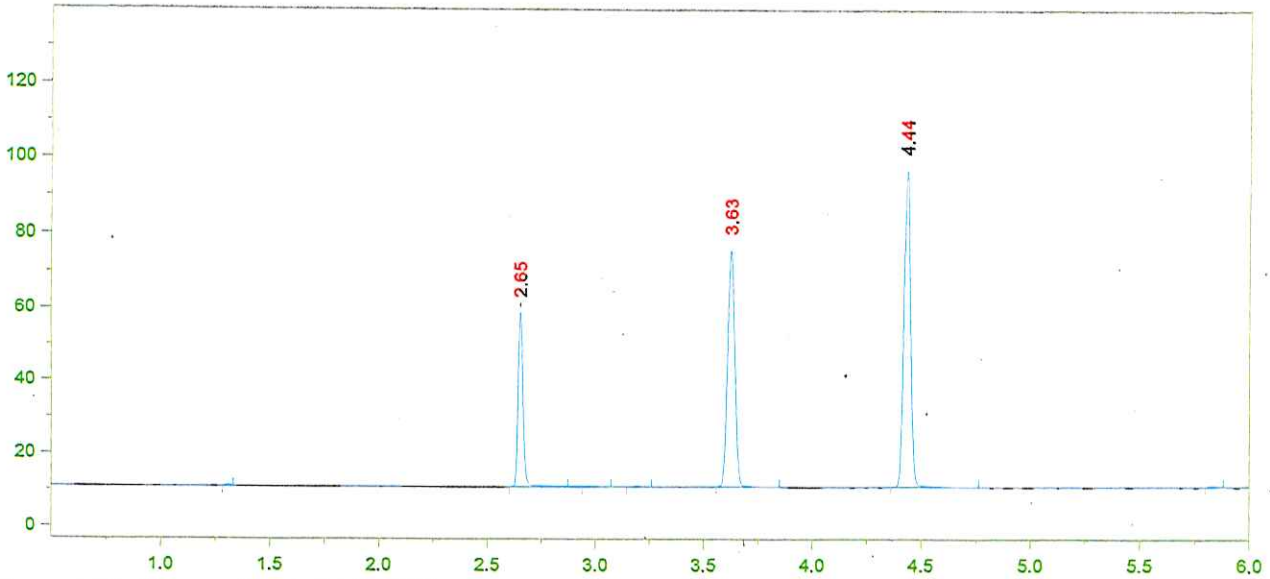
CCS Meth: 0.0790 g/100ml EtOH

±5% : 0.0750 – 0.0829

Recovery: $\frac{0.079}{0.080}$ = 98.7%

12/3/15

15-25-600 6667
12/4/15

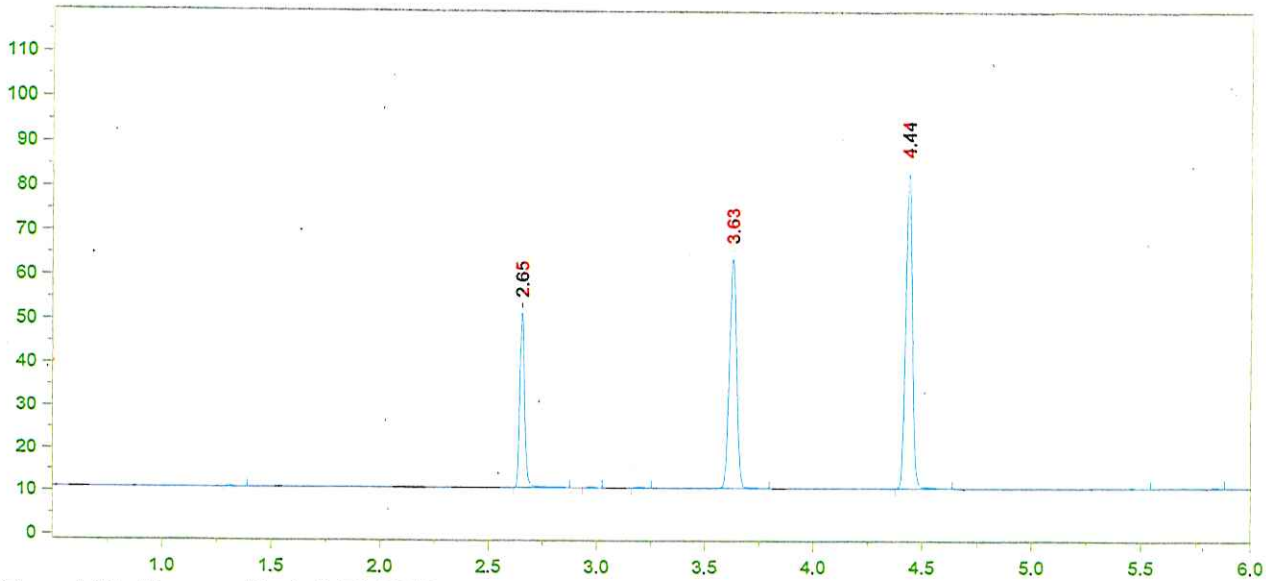


Format File Name = AlcoholVFL.FMT

Today's Date = 12/3/2015
Today's Time = 1:13:00 AM
Bound File Name = VFL12022015.0052.RAW
Sample Name = CCS
Date Taken = 12/3/2015 1:12:54 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	74209	0.0771
6	3.63	t-Butanol	149297	1.0341
7	4.44	n-Propanol	182907	1.0000

15-25.00 OS ~~6768~~ 12/4/15



Format File Name = AlcoholVFL.FMT

Today's Date = 12/3/2015
Today's Time = 1:26:47 AM
Bound File Name = VFL12022015.0053.RAW
Sample Name = CCS
Date Taken = 12/3/2015 1:26:39 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	63651	0.0789
6	3.63	t-Butanol	122010	1.0081
7	4.44	n-Propanol	153332	1.0000

CCS MEAN: 0.0780 [illegible]

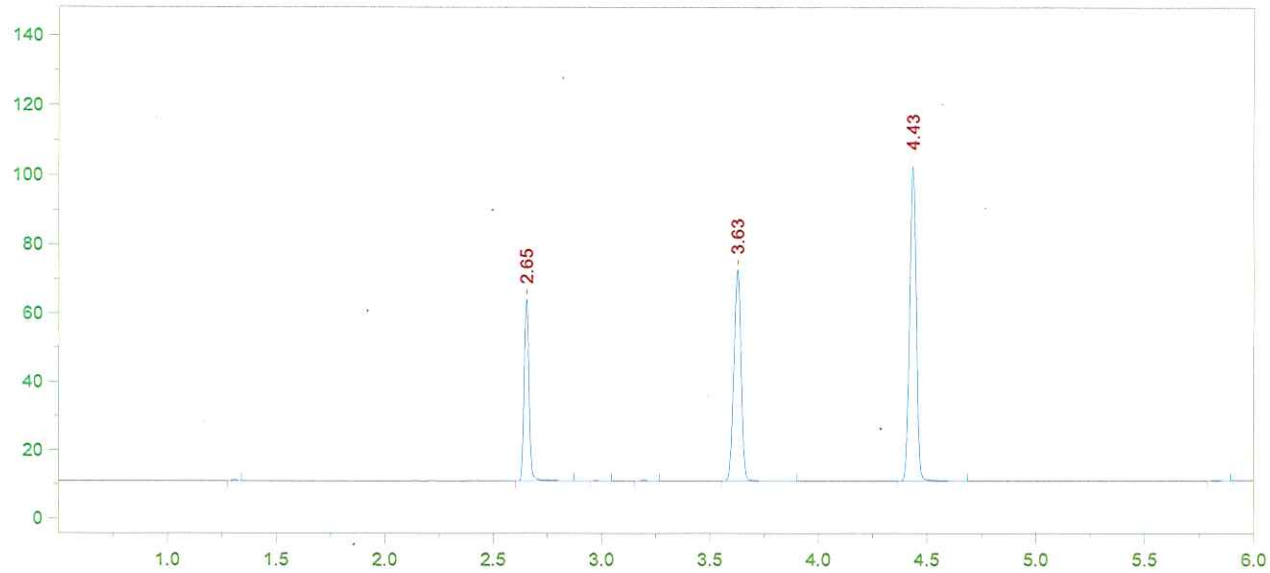
±5%: 0.0741 - 0.0819

Recovery: $\frac{0.078}{0.080}$ = 97.5%

12/3/15

10-25-100

68-69
12/14/15



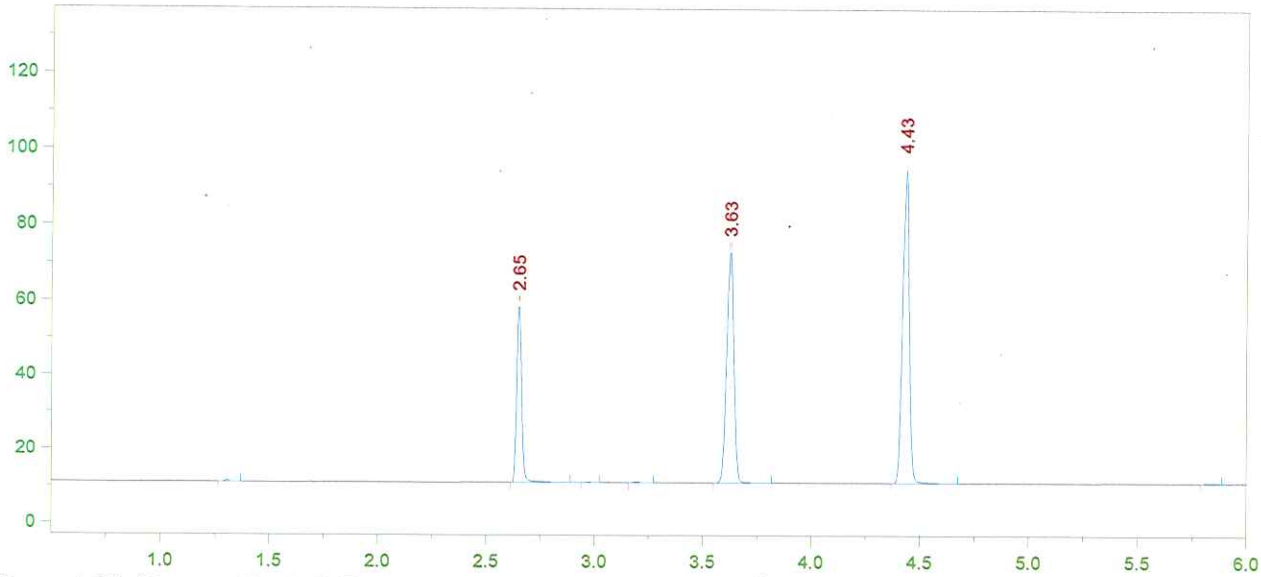
Format File Name = AlcoholVFL.FMT

Today's Date = 12/3/2015
Today's Time = 10:49:07 AM
Bound File Name = VFL12022015.0054.RAW
Sample Name = CCS
Date Taken = 12/3/2015 10:49:00 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	82653	0.0811
6	3.63	t-Butanol	141872	0.9283
7	4.43	n-Propanol	193604	1.0000

15-25-100

Do 70-28 ~~69-70~~



Format File Name = AlcoholVFL.FMT

Today's Date = 12/3/2015
Today's Time = 11:05:57 AM
Bound File Name = VFL12022015.0055.RAW
Sample Name = CCS
Date Taken = 12/3/2015 11:05:49 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	74009	0.0790
6	3.63	t-Butanol	143207	1.0188
7	4.43	n-Propanol	178067	1.0000

CCS Mean: 0.0800 g/100ml EtOH

±5%: 0.0760 – 0.0840

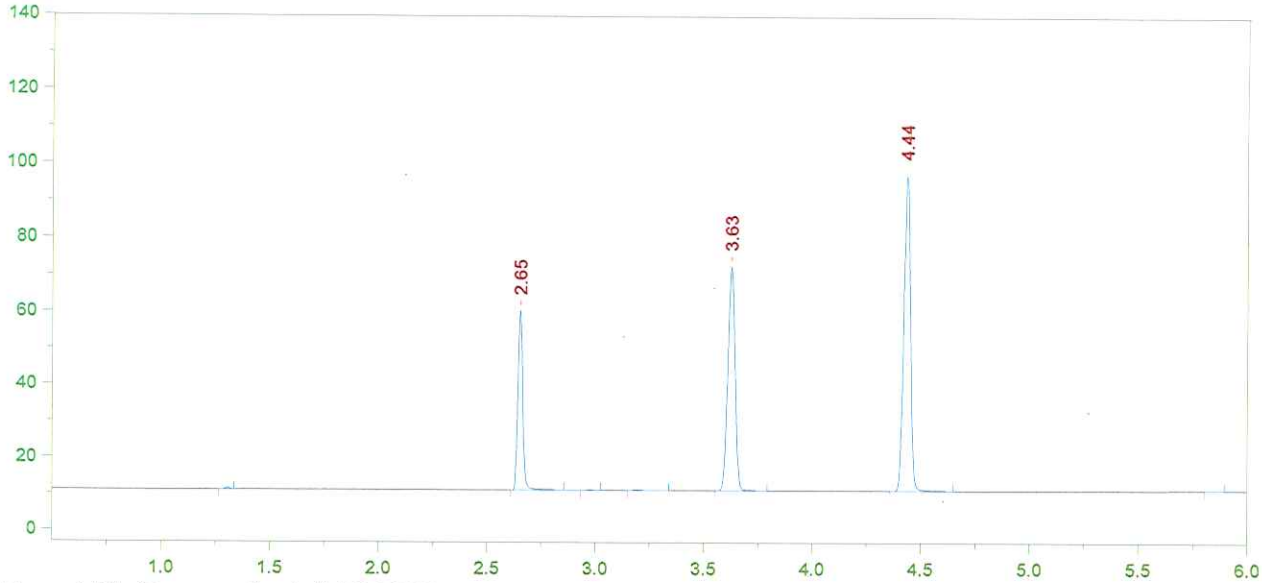
Recovery: $\frac{0.080}{0.080}$ = 100%

[illegible] 12/7/15

15-25-100

[illegible] 12/1/15

[illegible] 12/1/15



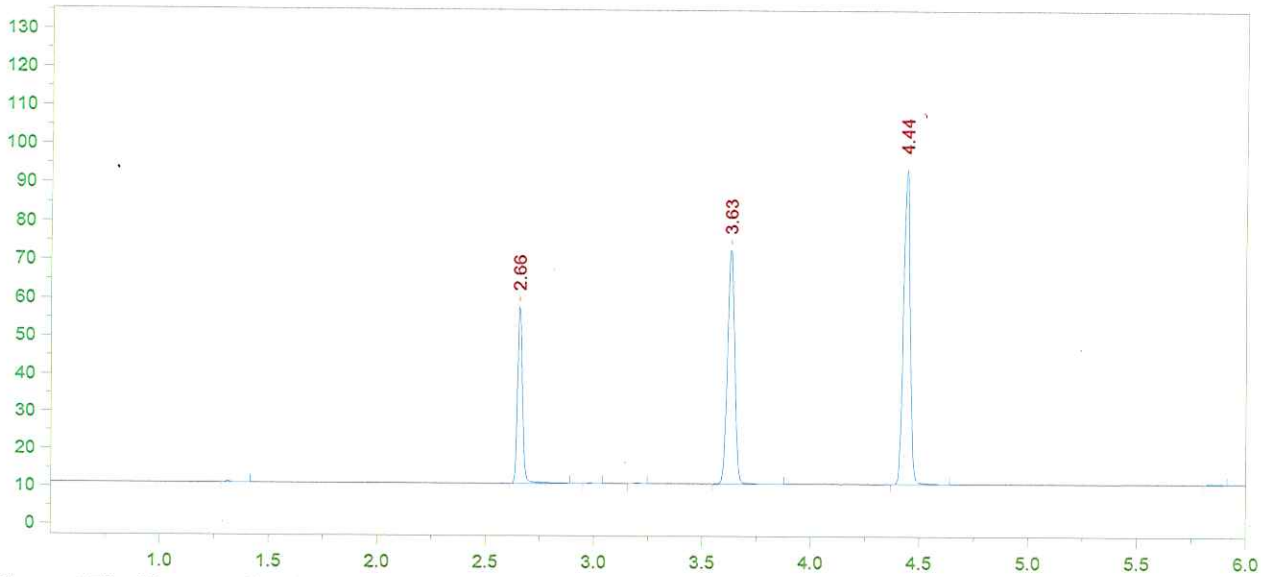
Format File Name = AlcoholVFL.FMT

Today's Date = 12/3/2015
Today's Time = 11:19:36 AM
Bound File Name = VFL12022015.0056.RAW
Sample Name = AQ
Date Taken = 12/3/2015 11:19:32 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	76337	0.0795
6	3.63	t-Butanol	141520	0.9830
7	4.44	n-Propanol	182393	1.0000

15-25-100

12/3/15



Format File Name = AlcoholVFL.FMT

Today's Date = 12/3/2015
Today's Time = 11:37:20 AM
Bound File Name = VFL12022015.0057.RAW
Sample Name = AQ
Date Taken = 12/3/2015 11:37:15 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.66	Ethanol	72778	0.0786
6	3.63	t-Butanol	143321	1.0314
7	4.44	n-Propanol	176047	1.0000

AQ mean: 0.0790 g/100 m blood

±5%: 0.0750 - 0.0829

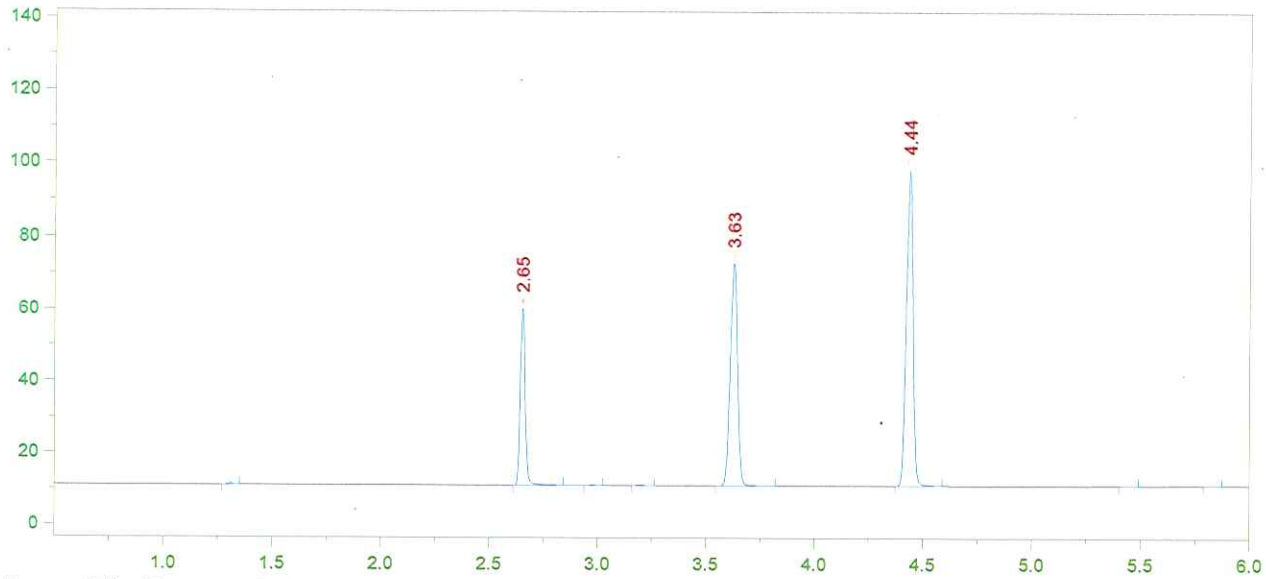
Recovery: $\frac{0.079}{0.080}$ = 98.7%

12/3/15

15-25-100

12/7/15

12/14/15



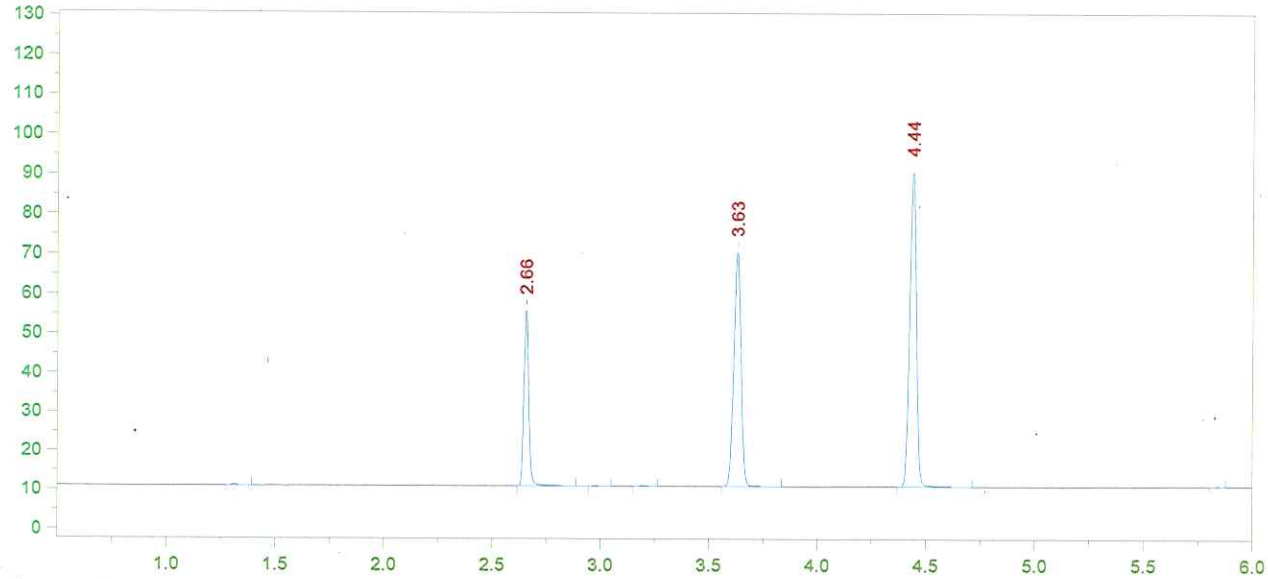
Format File Name = AlcoholVFL.FMT

Today's Date = 12/3/2015
Today's Time = 11:50:31 AM
Bound File Name = VFL12022015.0058.RAW
Sample Name = CCS
Date Taken = 12/3/2015 11:50:26 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	76664	0.0790
6	3.63	t-Butanol	143174	0.9829
7	4.44	n-Propanol	184532	1.0000

15-25-100

12/3/15
32
74 73



Format File Name = AlcoholVFL.FMT

Today's Date = 12/3/2015
Today's Time = 12:07:06 PM
Bound File Name = VFL12022015.0059.RAW
Sample Name = CCS
Date Taken = 12/3/2015 12:06:59 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL12022015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.66	Ethanol	69708	0.0781
6	3.63	t-Butanol	137453	1.0262
7	4.44	n-Propanol	169679	1.0000

CCS Mean: 0.0785 g/100 ml EtOH

±5%: 0.0746 - 0.0824

Recovery: $\frac{0.078}{0.080}$ = 97.5%

12/3/15

15-20-090

12/3/15