VERMONT FORENSIC LABORATORY

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Certificate of Analysis of DataMaster Certification Solution

On 10/25/2013, an ethanol solution was prepared by Rebecca Mead for use as a DataMaster Certification solution. The solution was prepared per standard laboratory practice and assigned the lot number 13-17-020 and an expiration date of 10/25/2014.

On 11/4/2013 and 11/5/2013, the solution was analyzed against calibration VFL11042013 and VFL11052013. 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 on Wednesday, November 06, 2013.

Rebecca Mead

Rebecca Mead

0.02 Certification Solution 2L
Lot # 13-17-020
Prepared 10/25/2013 by RLM
Exp 10/25/2014

RLM CAL VFL11042013
RLM/ALB Vials
Analyzed on 11/04/2013

0.0199	rlm
0.0198	
0.0195	
0.0198	
0.0195	
0.0201	
0.0194	
0.0205	alb
0.0201	
0.0204	
0.0197	
0.0201	
0.0200	
0.0200	

Ave. = 0.0199
Std Dev. = 0.0003
Range = 0.0194-0.0205

RLM CAL VFL11052013
RLM/ALB Vials
Analyzed on 11/05/2013

0.0197	rlm
0.0199	
0.0195	
0.0199	
0.0195	
0.0197	
0.0195	
0.0197	alb
0.0198	
0.0202	
0.0197	
0.0201	
0.0195	
0.0204	

Ave. = 0.0198
Std Dev. = 0.0003
Range = 0.0195-0.0204

Total Values from Both Runs

Average	Mean
0.0199	0.0194
0.0198	0.0195
0.0195	
0.0198	
0.0195	
0.0201	
0.0194	
0.0205	0.0197
0.0201	
0.0204	
0.0197	
0.0201	
0.0200	0.0198
0.0200	
0.0197	
0.0199	0.0199
0.0195	
0.0199	
0.0195	0.0200
0.0197	
0.0195	0.0201
0.0197	
0.0198	
0.0202	
0.0197	0.0202
0.0201	0.0204
0.0195	
0.0204	0.0205

Ave. =	0.0199
Avg Std Dev. =	0.0003
Mean =	0.0200
Mean Std Dev. =	0.0004
Range =	0.0194-0.0205
RPD =	5.53%

11/7/2013

Headspace Alcohol Analysis Standards Coversheet

Analyst: RLM Date: 11/4/13

LLCA 11/7/2013

Calibration Standards:

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

(c)

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

Control Sample:

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

Calibration and Control Sample Data:

Vial No.	Sample Identification		Result	In Range?	Comments
1	Blank		<0.005	(Y) N	
2	Compound Retention Times:			N/A	
		Acetaldehyde	1.92		
		Methanol	2.02		
		Ethanol	2.65		
		Acetone	3.06		
		Isopropanol	3.19		
		T- butanol	3.63		
		n-propanol	4.44		
3	Standard A		0.006	(Y) N	
4	Standard B		0.024	(Y) N	
5	Standard C		0.082	(Y) N	
6	Standard D		0.196	(Y) N	
7	Standard E		0.414	(Y) N	
8	Aqueous QC		0.0796	(Y) N	Avg = 0.080 (100% recovery) ✓
9	Aqueous QC		0.0798	(Y) N	

13-17-020 2 RLM

File Name: C:\Methods\VFL11042013.CAL
Version: 7

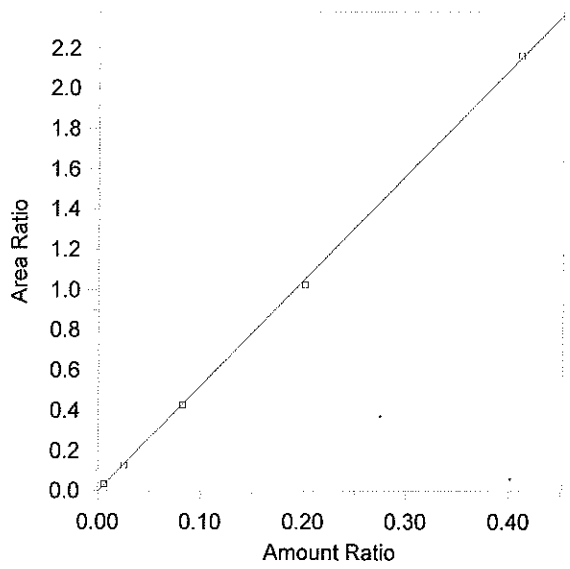
Creator:
Description:
Reason for change:

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 = 5.229968 X + 0

Linear fit with equal weighting, forced to origin

Coefficient of determination:	0.9996774
Average error:	1.739%
Average CF:	5.178524
RSD:	2.174%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source	Date and time
1	(0.091)	(85146)	--	--	0.091	85146	Manual	8/12/2013 4:03:34 PM
2	0.0063	6884.255	1092739	1.230	0.0063	0.0333541	C:\Alcohol Data\SIM11042013\SIM11042013.0003.BND	11/4/2013 3:37:40 PM
3	0.0254	25445.13	1001777	-3.790	0.0254	0.1278066	C:\Alcohol Data\SIM11042013\SIM11042013.0004.BND	11/4/2013 3:55:24 PM
4	0.0822	87874.05	1069027	-0.389	0.0822	0.4282309	C:\Alcohol Data\SIM11042013\SIM11042013.0005.BND	11/4/2013 4:09:23 PM
5	0.2012	218956.8	1088255	-2.628	0.2012	1.024613	C:\Alcohol Data\SIM11042013\SIM11042013.0006.BND	11/4/2013 4:25:05 PM
6	0.4112	442693.6	1076590	0.659	0.4112	2.164734	C:\Alcohol Data\SIM11042013\SIM11042013.0007.BND	11/4/2013 4:40:28 PM

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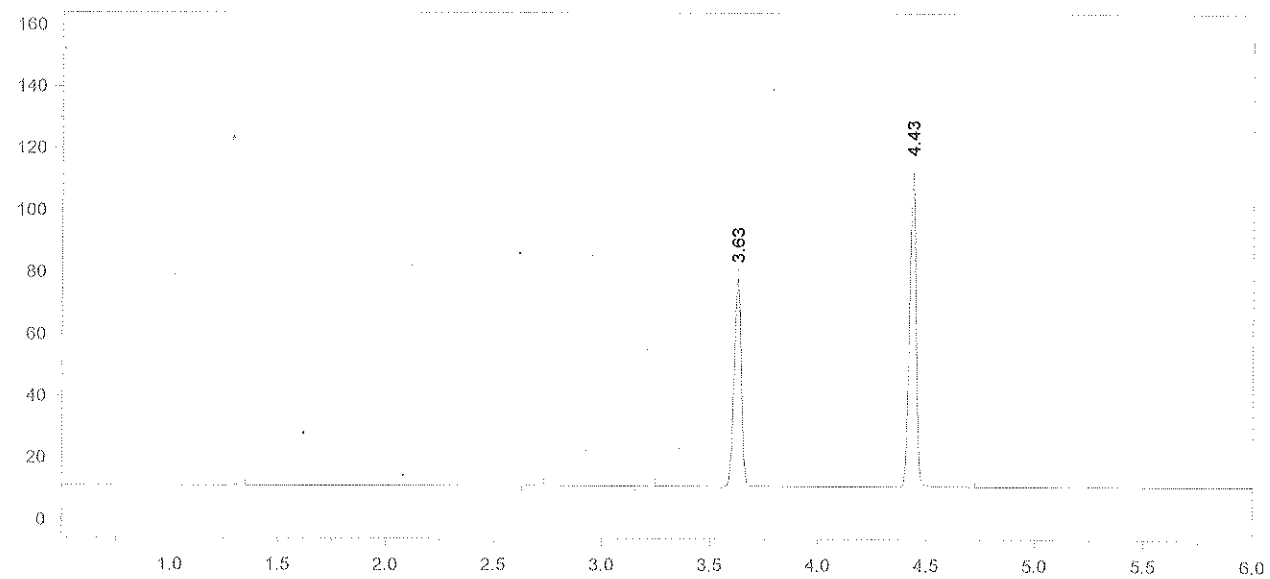
File Name = C:\Alcohol Data\SIM11042013\SIM11042013.SEQ
Version = 1
File Date = 11/4/2013 2:30:11 PM

Entry #	Raw File Name	Method File Name	Sample Name	Sample Wt.	Int. Std. Amount
1	SIM11042013.0001.raw	Blood Alc temp VFL.MET	Blank	1.00	1.00
2	SIM11042013.0002.raw	Blood Alc temp VFL.MET	TMX	1.00	1.00
3	SIM11042013.0003.raw	Blood Alc temp VFL.MET	STD A	1.00	1.00
4	SIM11042013.0004.raw	Blood Alc temp VFL.MET	STD B	1.00	1.00
5	SIM11042013.0005.raw	Blood Alc temp VFL.MET	STD C	1.00	1.00
6	SIM11042013.0006.raw	Blood Alc temp VFL.MET	STD D	1.00	1.00
7	SIM11042013.0007.raw	Blood Alc temp VFL.MET	STD E	1.00	1.00
8	SIM11042013.0008.raw	Blood Alc temp VFL.MET	AQ QC	1.00	1.00
9	SIM11042013.0009.raw	Blood Alc temp VFL.MET	AQ QC	1.00	1.00
10	SIM11042013.0010.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
11	SIM11042013.0011.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
12	SIM11042013.0012.raw	simsoln.met	0.02 RLM	1.00	1.00
13	SIM11042013.0013.raw	simsoln.met	0.02 RLM	1.00	1.00
14	SIM11042013.0014.raw	simsoln.met	0.02 RLM	1.00	1.00
15	SIM11042013.0015.raw	simsoln.met	0.02 RLM	1.00	1.00
16	SIM11042013.0016.raw	simsoln.met	0.02 RLM	1.00	1.00
17	SIM11042013.0017.raw	simsoln.met	0.02 RLM	1.00	1.00
18	SIM11042013.0018.raw	simsoln.met	0.02 RLM	1.00	1.00
19	SIM11042013.0019.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
20	SIM11042013.0020.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
21	SIM11042013.0021.raw	simsoln.met	0.02 ALB	1.00	1.00
22	SIM11042013.0022.raw	simsoln.met	0.02 ALB	1.00	1.00
23	SIM11042013.0023.raw	simsoln.met	0.02 ALB	1.00	1.00
24	SIM11042013.0024.raw	simsoln.met	0.02 ALB	1.00	1.00
25	SIM11042013.0025.raw	simsoln.met	0.02 ALB	1.00	1.00
26	SIM11042013.0026.raw	simsoln.met	0.02 ALB	1.00	1.00
27	SIM11042013.0027.raw	simsoln.met	0.02 ALB	1.00	1.00
28	SIM11042013.0028.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
29	SIM11042013.0029.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00

13-17-020 4 [illegible]

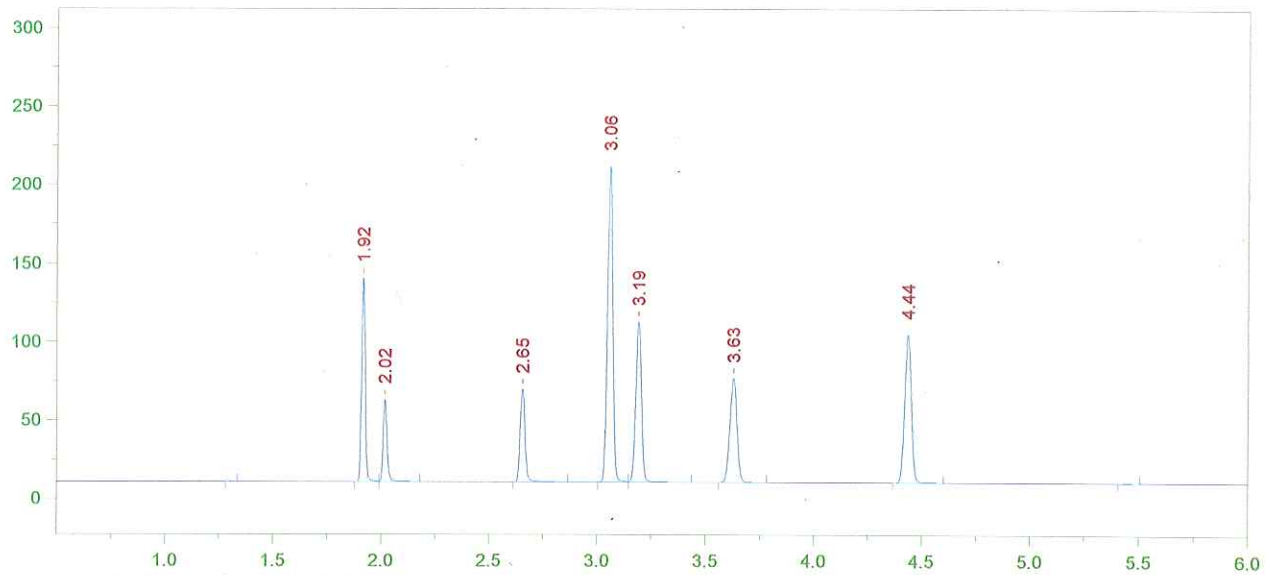


Format File Name = AlcoholVFL.FMT

Today's Date = 11/5/2013
Today's Time = 7:59:04 AM
Bound File Name = SIM11042013.0001.RAW
Sample Name = Blank
Date Taken = 11/4/2013 3:06:25 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
4	3.63	t-Butanol	155528	0.9644
5	4.43	n-Propanol	216928	1.0000

13-17-020 5 RZm



Format File Name = AlcoholVFL.FMT

Today's Date = 11/5/2013
Today's Time = 7:59:10 AM
Bound File Name = SIM11042013.0002.RAW
Sample Name = TMX
Date Taken = 11/4/2013 3:23:49 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	1.92	Acetaldehyde	151182	0.0520
3	2.02	Methanol	67082	0.1370
4	2.65	Ethanol	93371	0.0893
5	3.06	Acetone	344167	0.0940
6	3.19	Isopropanol	192364	0.0850
7	3.63	t-Butanol	153456	1.0330
8	4.44	n-Propanol	199822	1.0000

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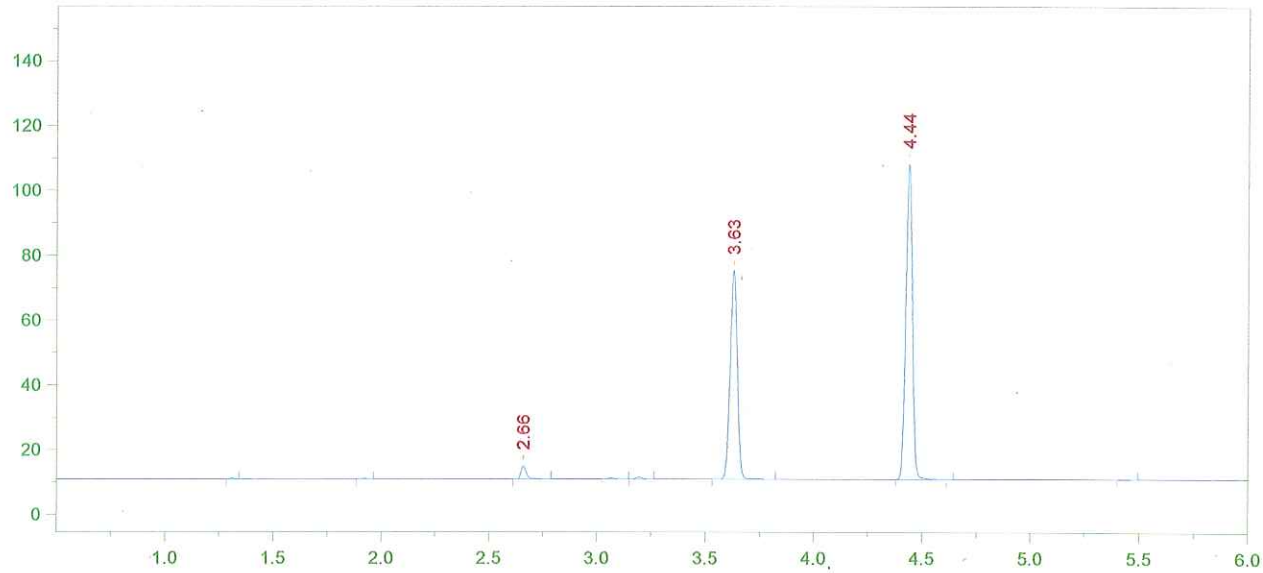
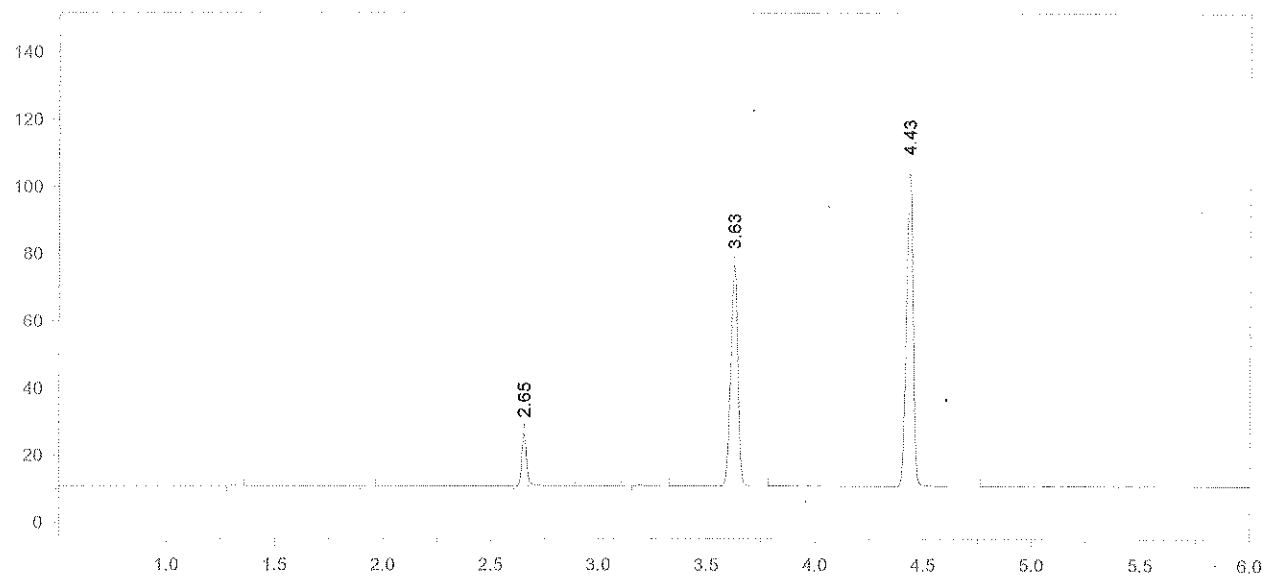


Format File Name = AlcoholVFL.FMT

Today's Date = 11/5/2013
Today's Time = 7:59:16 AM
Bound File Name = SIM11042013.0003.RAW
Sample Name = STD A
Date Taken = 11/4/2013 3:37:36 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.66	Ethanol	06884	0.0064 *
6	3.63	t-Butanol	149187	0.9723
7	4.44	n-Propanol	206399	1.0000

13-17-020 7 RLM

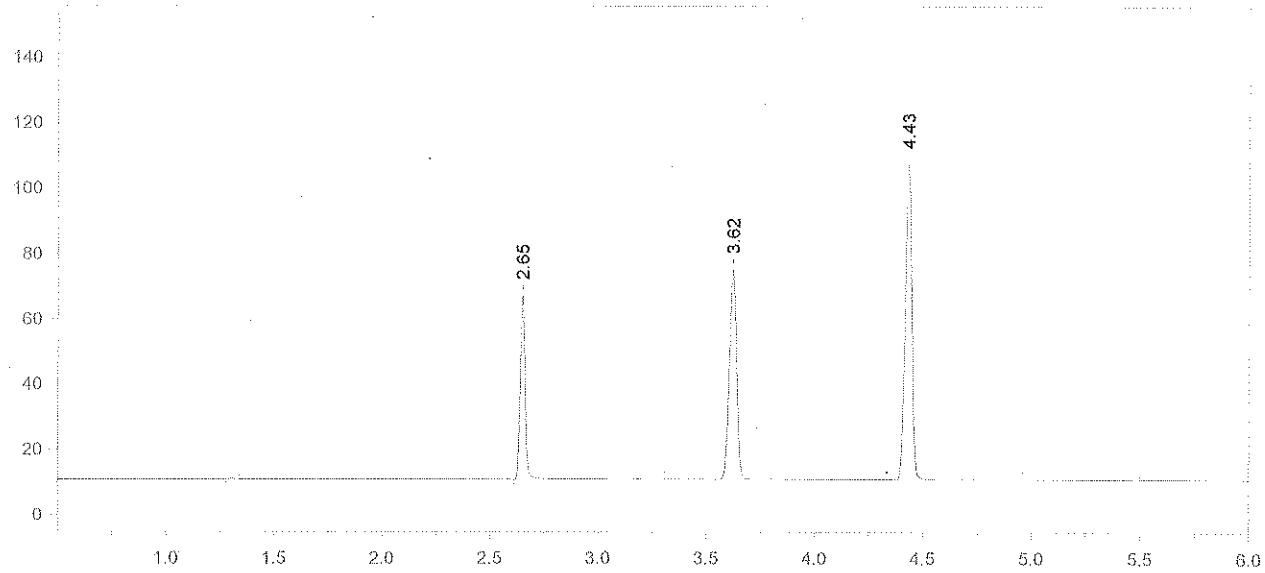


Format File Name = AlcoholVFL.FMT

Today's Date = 11/5/2013
Today's Time = 7:59:21 AM
Bound File Name = SIM11042013.0004.RAW
Sample Name = STD B
Date Taken = 11/4/2013 3:55:13 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	25445	0.0244 *
6	3.63	t-Butanol	152863	1.0328
7	4.43	n-Propanol	199091	1.0000

13-17-020 8

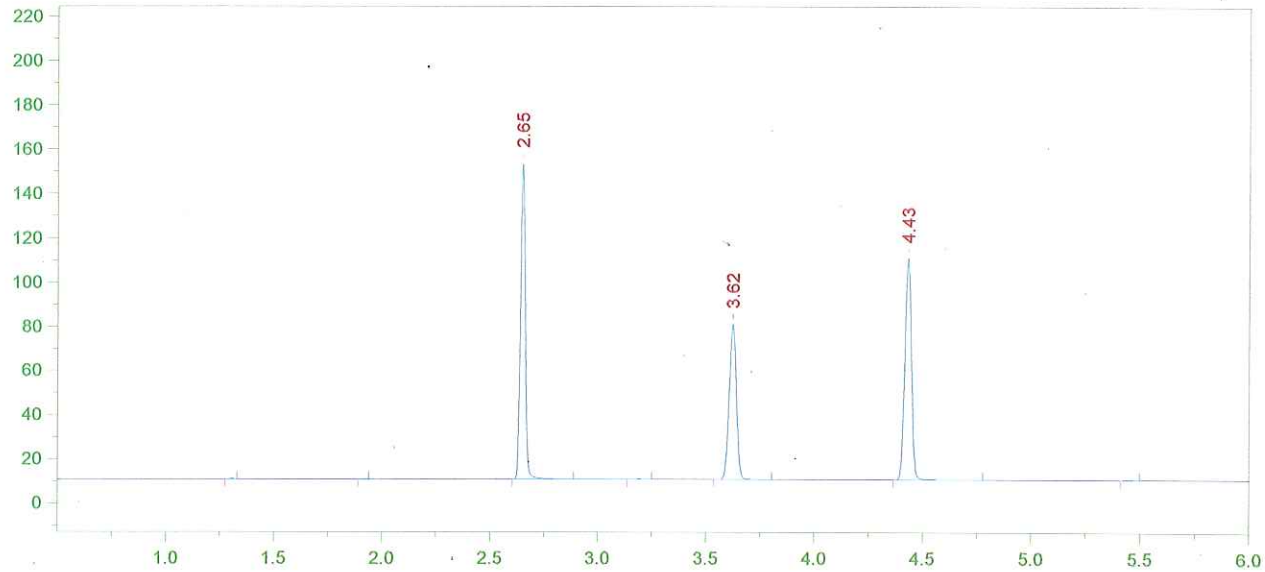


Format File Name = AlcoholVFL.FMT

Today's Date = 11/5/2013
Today's Time = 7:59:29 AM
Bound File Name = SIM11042013.0005.RAW
Sample Name = STD C
Date Taken = 11/4/2013 4:09:16 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	87874	0.0819
4	3.62	t-Butanol	148661	0.9745
5	4.43	n-Propanol	205203	1.0000

13-17-020 9 Klm

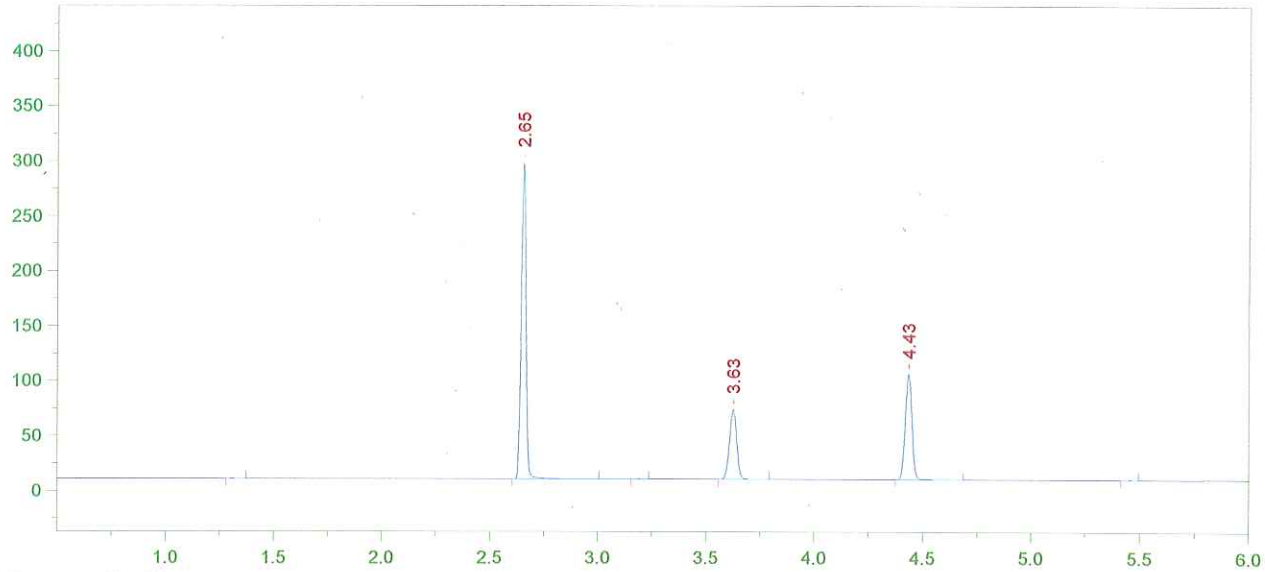


Format File Name = AlcoholVFL.FMT

Today's Date = 11/5/2013
Today's Time = 7:59:36 AM
Bound File Name = SIM11042013.0006.RAW
Sample Name = STD D
Date Taken = 11/4/2013 4:24:54 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	218957	0.1959 *
5	3.62	t-Butanol	162517	1.0230
6	4.43	n-Propanol	213697	1.0000

13-17-020 10 [illegible]

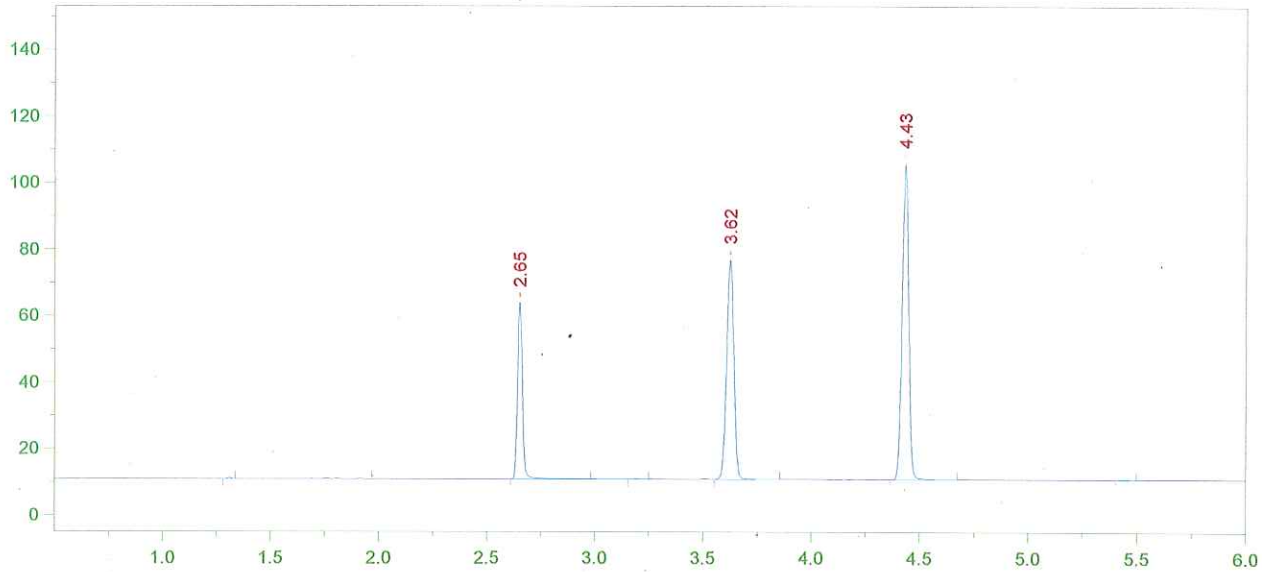


Format File Name = AlcoholVFL.FMT

Today's Date = 11/5/2013
Today's Time = 7:59:41 AM
Bound File Name = SIM11042013.0007.RAW
Sample Name = STD E
Date Taken = 11/4/2013 4:40:23 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	442694	0.4139 *
4	3.63	t-Butanol	146613	0.9644
5	4.43	n-Propanol	204503	1.0000

13-17-020 11 RKM

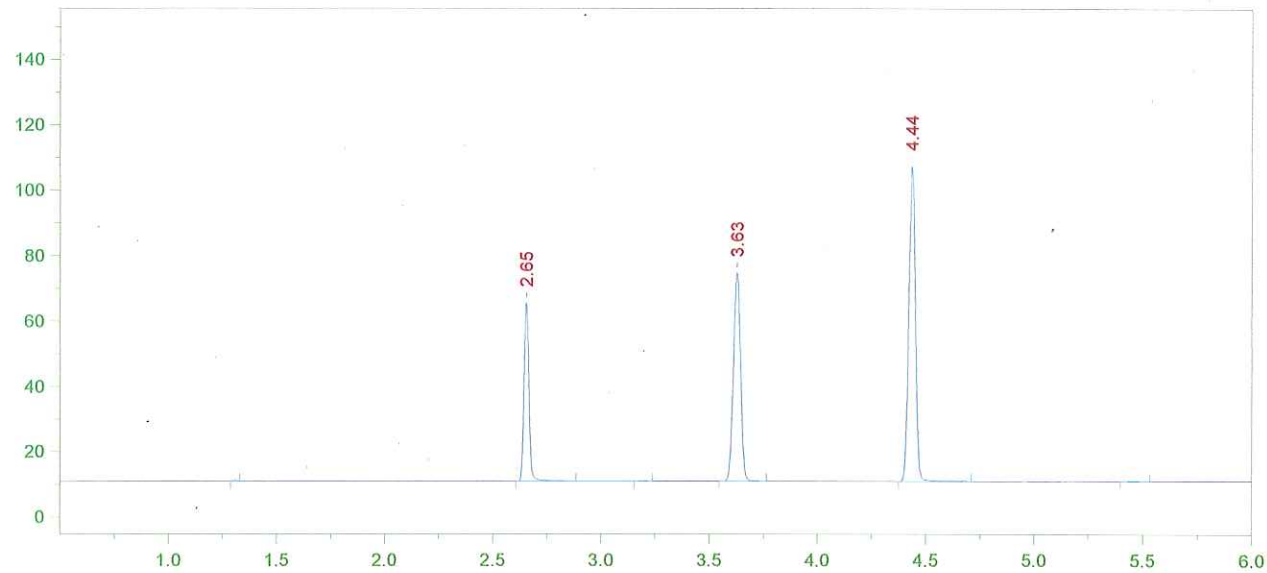


Format File Name = AlcoholVFL.FMT

Today's Date = 11/4/2013
Today's Time = 4:56:38 PM
Bound File Name = SIM11042013.0008.RAW
Sample Name = AQ QC
Date Taken = 11/4/2013 4:56:29 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	84131	0.0796 *
4	3.62	t-Butanol	153482	1.0217
5	4.43	n-Propanol	202079	1.0000

13-17-020 12 RJM



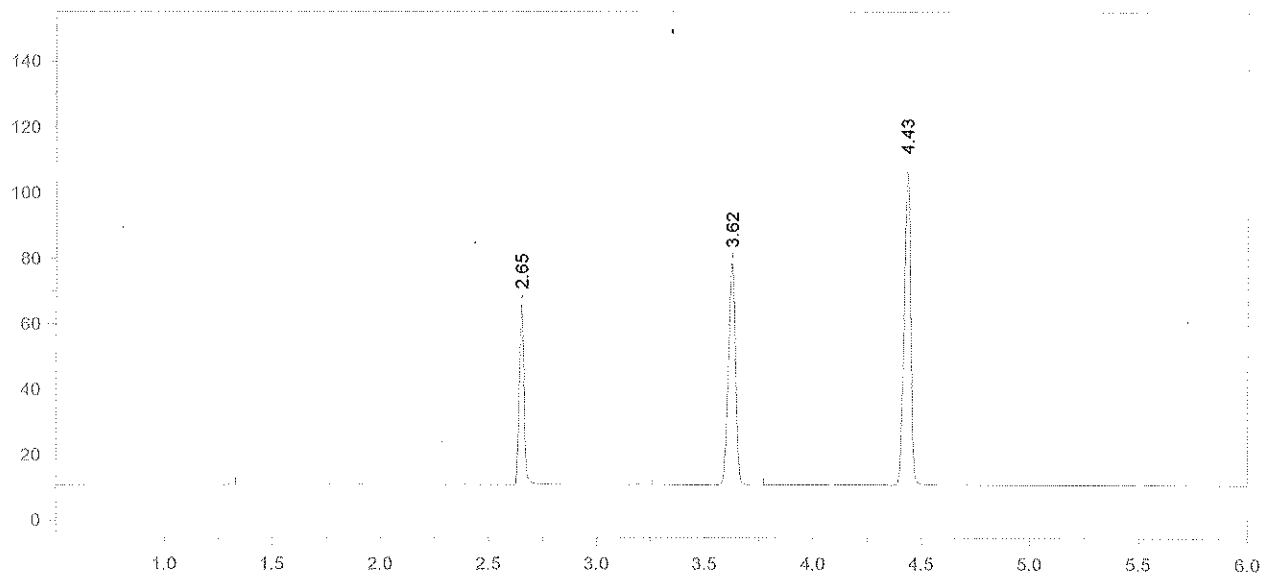
Format File Name = AlcoholVFL.FMT

Today's Date = 11/4/2013
Today's Time = 5:10:53 PM
Bound File Name = SIM11042013.0009.RAW
Sample Name = AQ QC
Date Taken = 11/4/2013 5:10:49 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	85489	0.0798 *
4	3.63	t-Butanol	147828	0.9705
5	4.44	n-Propanol	204894	1.0000

Avg #8 & #9 = 0.080
RZM ~~11/4/13~~ 11/5/13 RZM 11/5/13

13-17-020 13 RZM

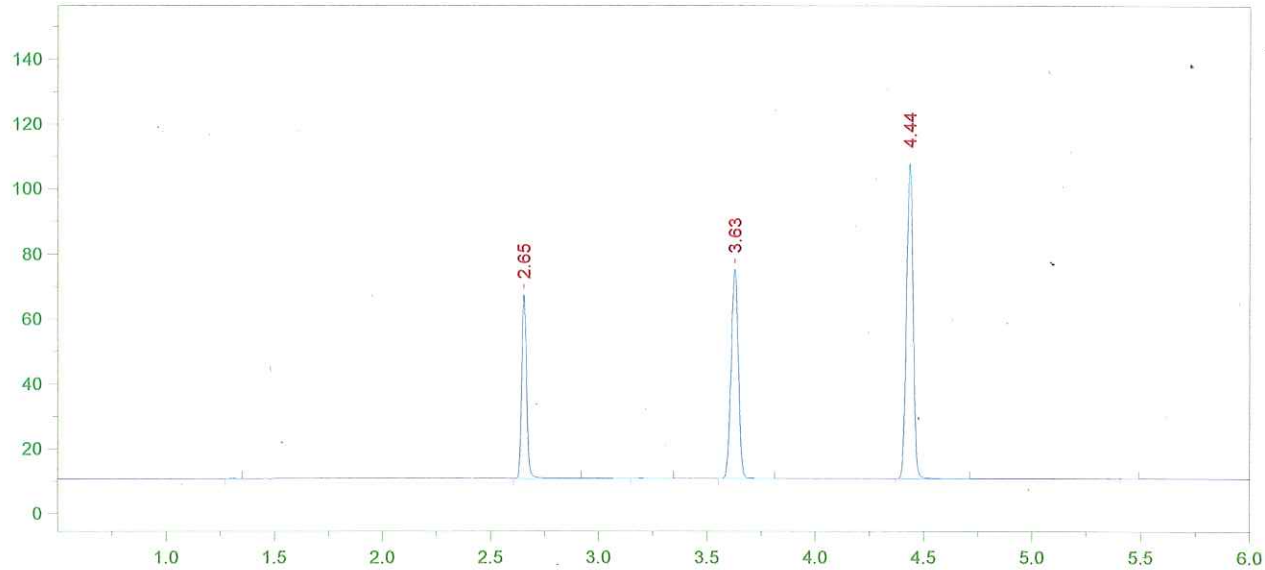


Format File Name = AlcoholVFL.FMT

Today's Date = 11/4/2013
Today's Time = 5:28:02 PM
Bound File Name = SIM11042013.0010.RAW
Sample Name = CCS
Date Taken = 11/4/2013 5:27:56 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	86625	0.0810 *
4	3.62	t-Butanol	156593	1.0307
5	4.43	n-Propanol	204362	1.0000

13-17-020 14



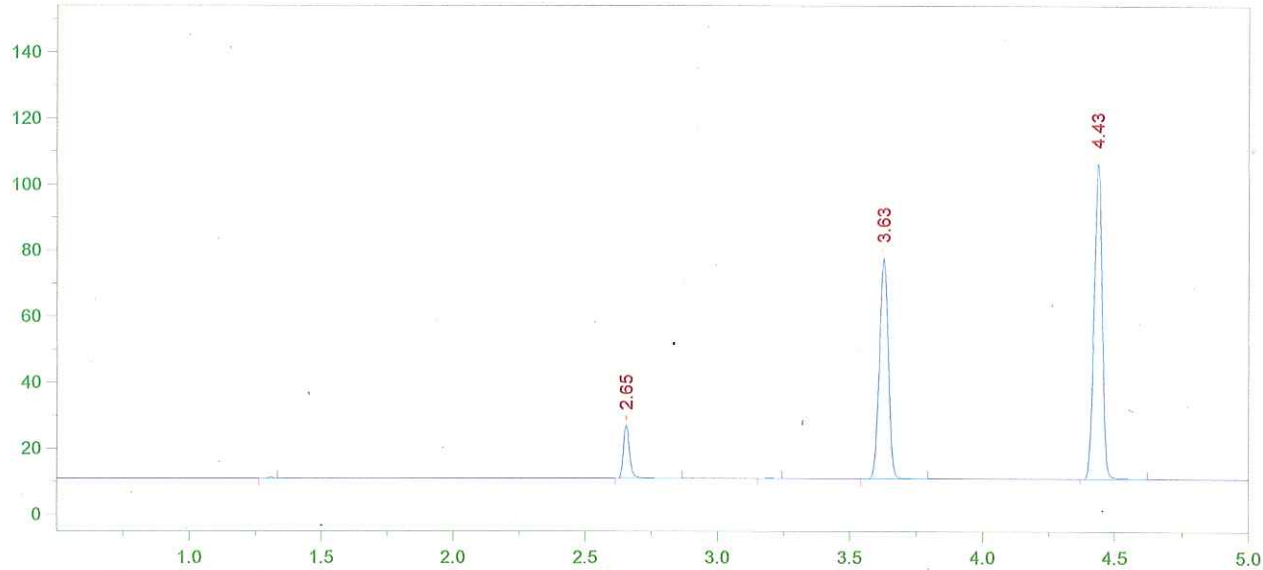
Format File Name = AlcoholVFL.FMT

Today's Date = 11/4/2013
Today's Time = 5:41:46 PM
Bound File Name = SIM11042013.0011.RAW
Sample Name = CCS
Date Taken = 11/4/2013 5:41:36 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	88966	0.0824 *
4	3.63	t-Butanol	149261	0.9721
5	4.44	n-Propanol	206548	1.0000

Avg #10 & #11 = 0.082
RZM 11/5/13

13-17-020 15 RZM

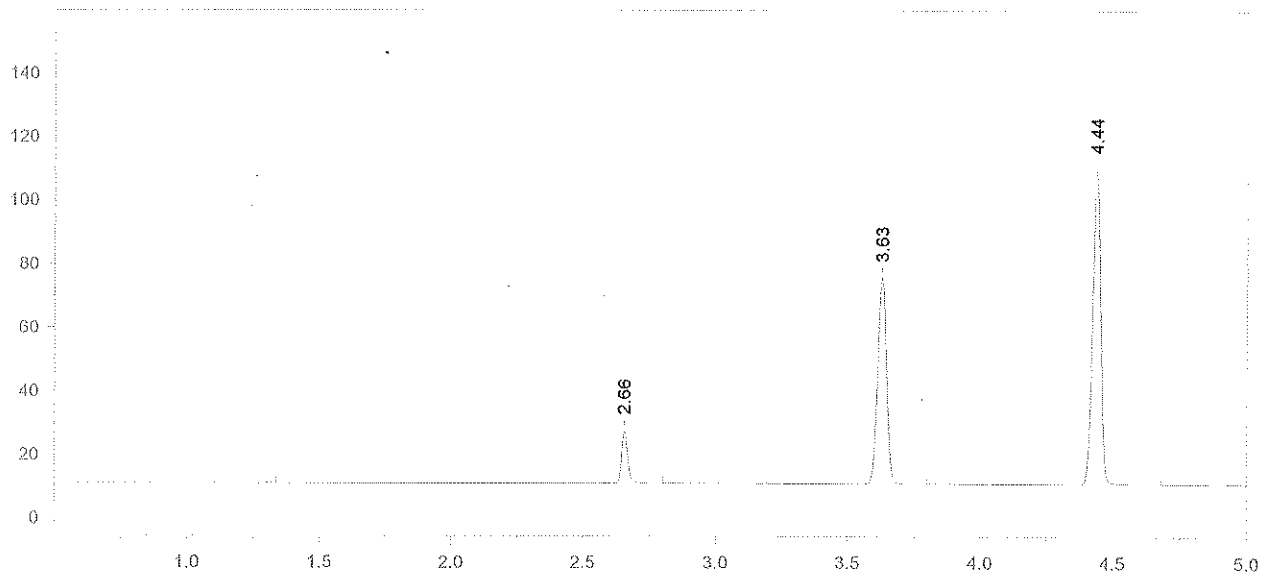


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/4/2013
Today's Time = 5:59:27 PM
Bound File Name = SIM11042013.0012.RAW
Sample Name = 0.02 RLM
Date Taken = 11/4/2013 5:59:20 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	25764	0.0243	0.0199
4	3.63	t-Butanol	154285	1.0254	0.8369
5	4.43	n-Propanol	202400	1.0000	0.8162

13-17-020 16 RLM

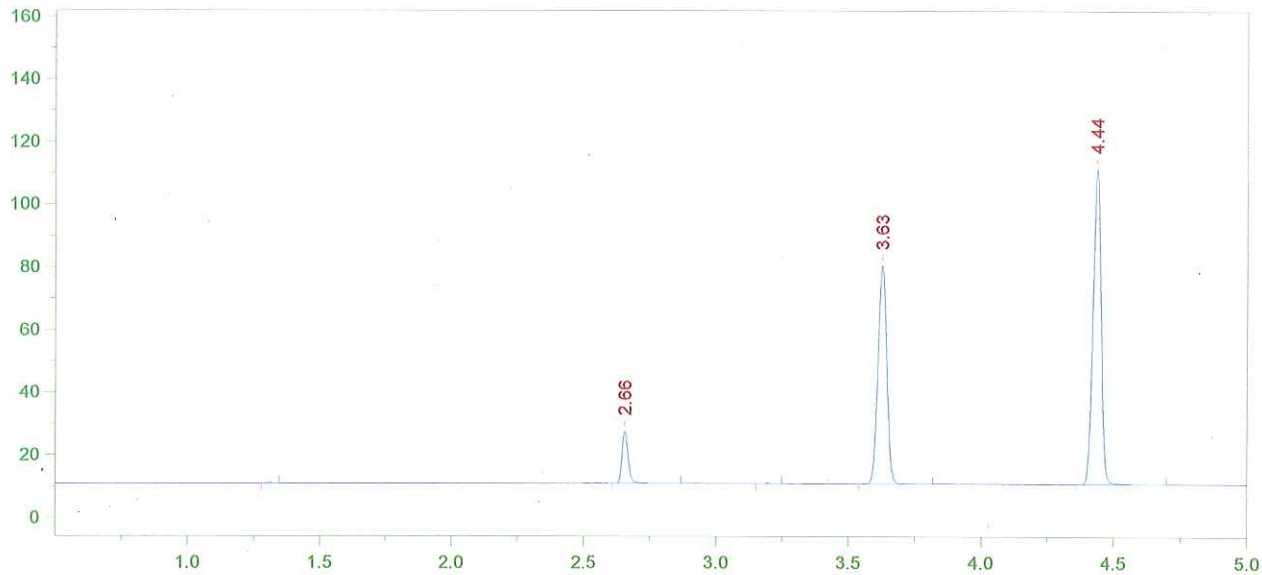


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/4/2013
Today's Time = 6:13:21 PM
Bound File Name = SIM11042013.0013.RAW
Sample Name = 0.02 RLM
Date Taken = 11/4/2013 6:13:11 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	26681	0.0243	0.0198
4	3.63	t-Butanol	150980	0.9665	0.7888
5	4.44	n-Propanol	210139	1.0000	0.8162

13-17-020 17 RLM

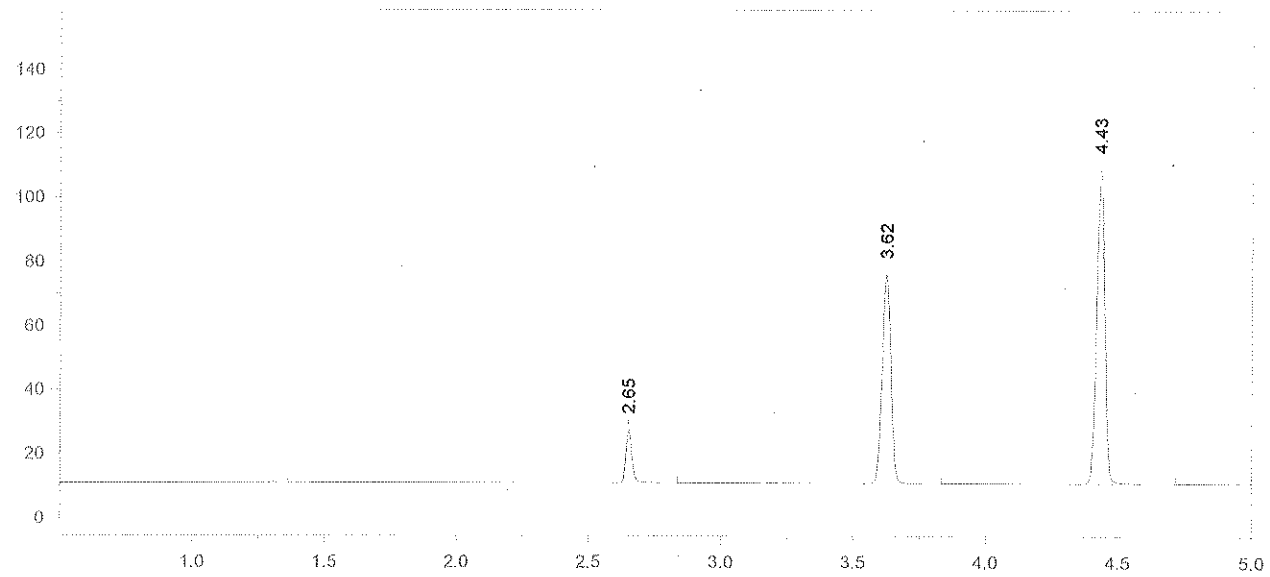


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/4/2013
Today's Time = 6:29:08 PM
Bound File Name = SIM11042013.0014.RAW
Sample Name = 0.02 RLM
Date Taken = 11/4/2013 6:29:01 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	26757	0.0239	0.0195
4	3.63	t-Butanol	161703	1.0170	0.8301
5	4.44	n-Propanol	213880	1.0000	0.8162

13-17-020 18 [illegible]

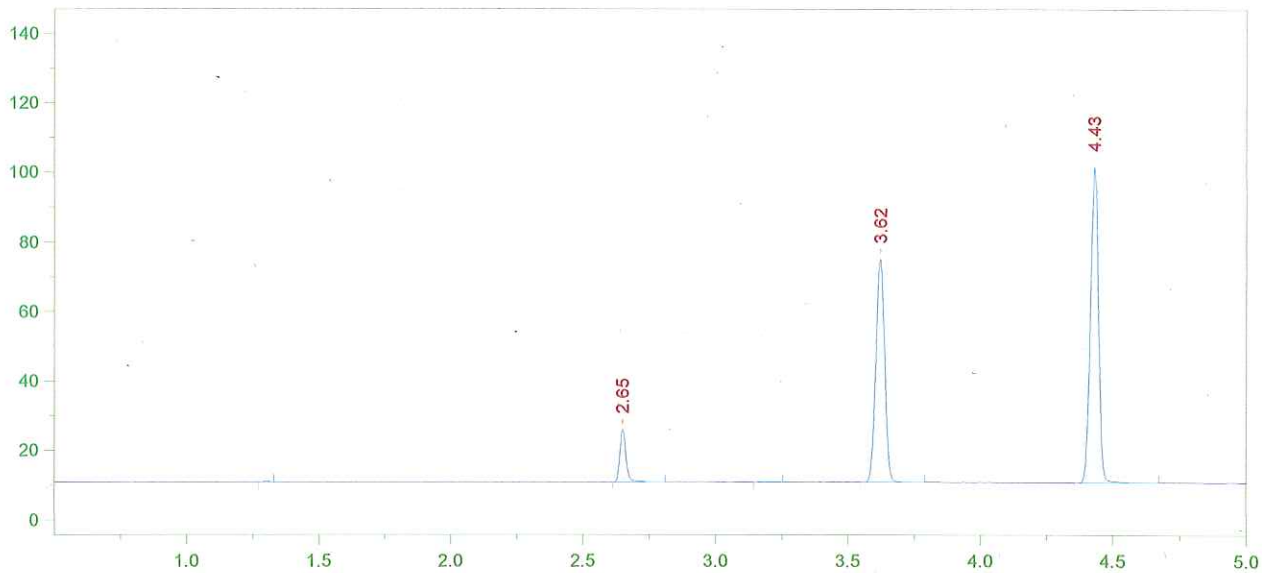


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/4/2013
Today's Time = 6:44:43 PM
Bound File Name = SIM11042013.0015.RAW
Sample Name = 0.02 RLM
Date Taken = 11/4/2013 6:44:38 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	26589	0.0243	0.0198
4	3.62	t-Butanol	151512	0.9742	0.7951
5	4.43	n-Propanol	209205	1.0000	0.8162

13-17-020 19 [illegible]

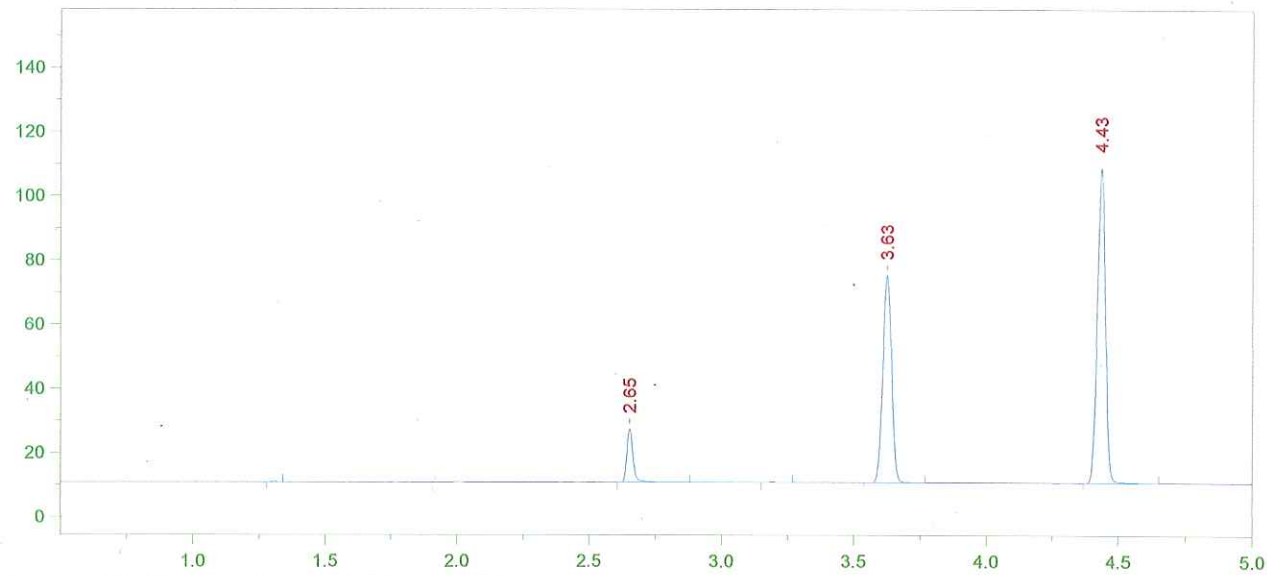


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/4/2013
Today's Time = 7:00:43 PM
Bound File Name = SIM11042013.0016.RAW
Sample Name = 0.02 RLM
Date Taken = 11/4/2013 7:00:33 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	24120	0.0239	0.0195
4	3.62	t-Butanol	148654	1.0380	0.8472
5	4.43	n-Propanol	192649	1.0000	0.8162

13-17-020 20 RLm

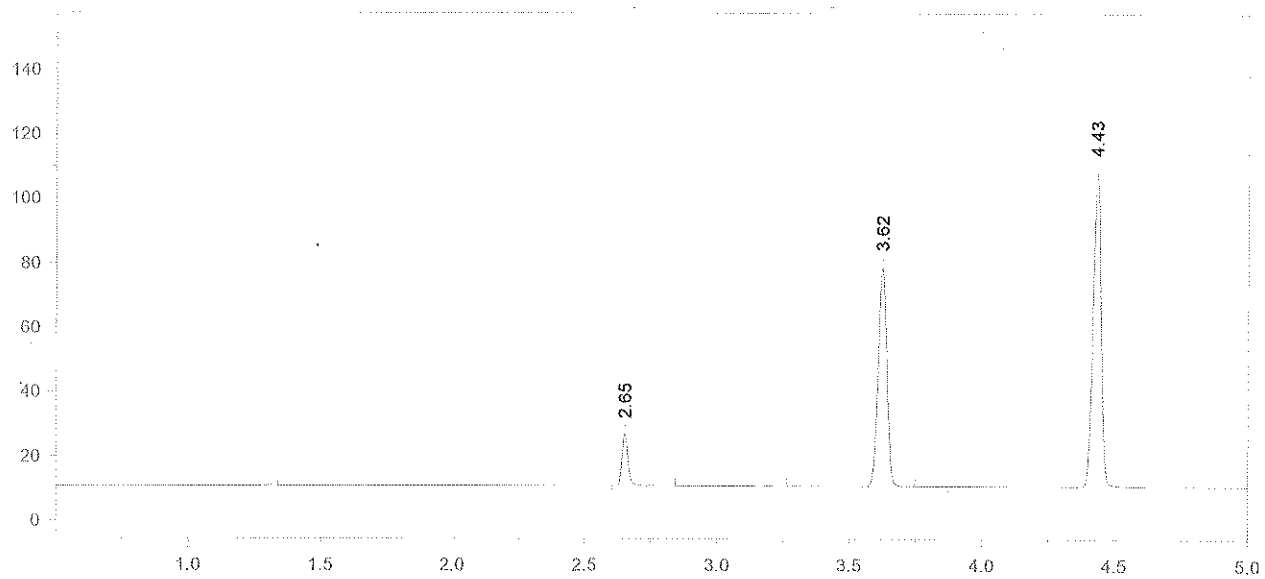


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/4/2013
Today's Time = 7:15:12 PM
Bound File Name = SIM11042013.0017.RAW
Sample Name = 0.02 RLM
Date Taken = 11/4/2013 7:15:02 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	26755	0.0246	0.0201
4	3.63	t-Butanol	150019	0.9712	0.7927
5	4.43	n-Propanol	207780	1.0000	0.8162

13-17-020 21 Kim

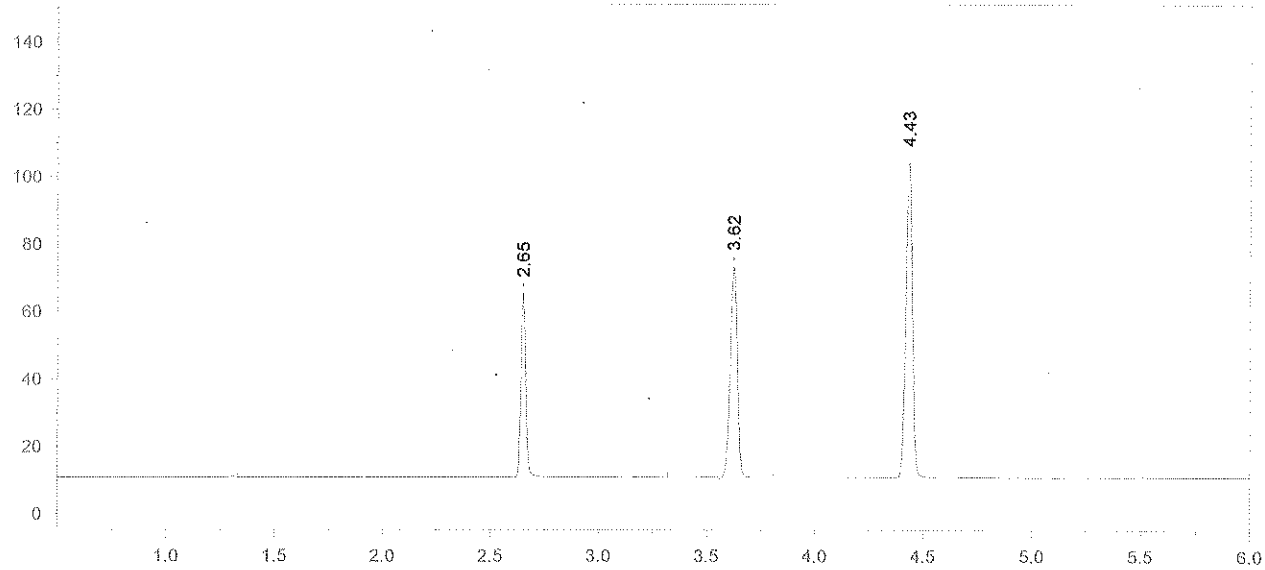


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/4/2013
Today's Time = 7:30:21 PM
Bound File Name = SIM11042013.0018.RAW
Sample Name = 0.02 RLM
Date Taken = 11/4/2013 7:30:17 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	26039	0.0238	0.0194
4	3.62	t-Butanol	157849	1.0158	0.8291
5	4.43	n-Propanol	209034	1.0000	0.8162

13-17-020 22 RLM

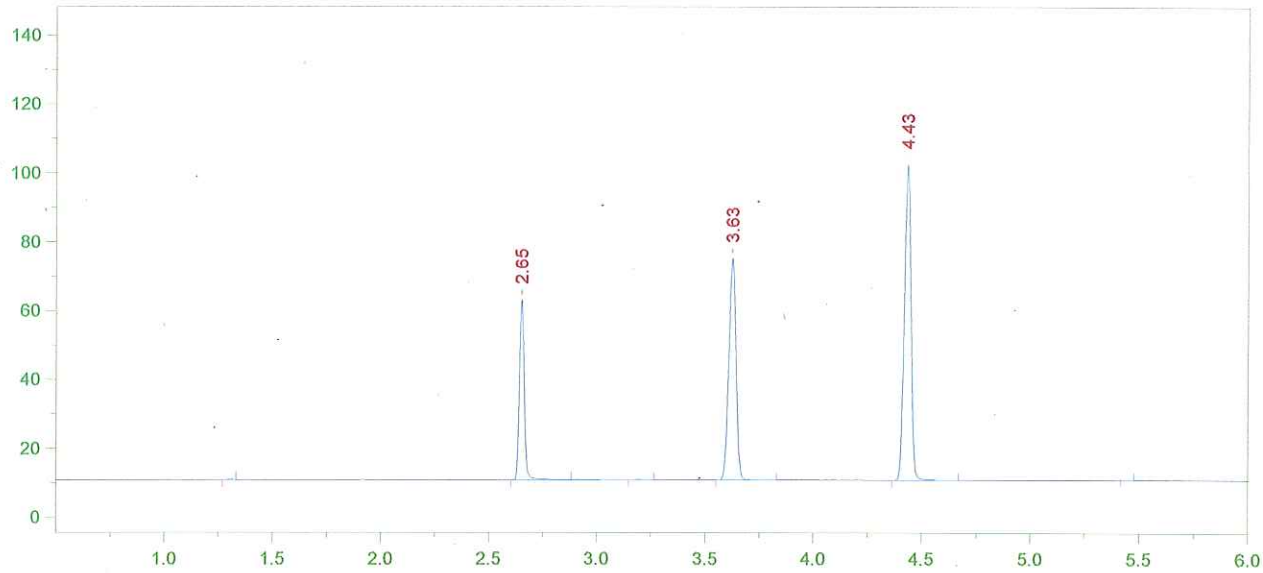


Format File Name = AlcoholVFL.FMT

Today's Date = 11/4/2013
Today's Time = 7:46:03 PM
Bound File Name = SIM11042013.0019.RAW
Sample Name = CCS
Date Taken = 11/4/2013 7:45:54 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	85547	0.0820 *
4	3.62	t-Butanol	145074	0.9784
5	4.43	n-Propanol	199460	1.0000

13-17-020 23 [illegible]



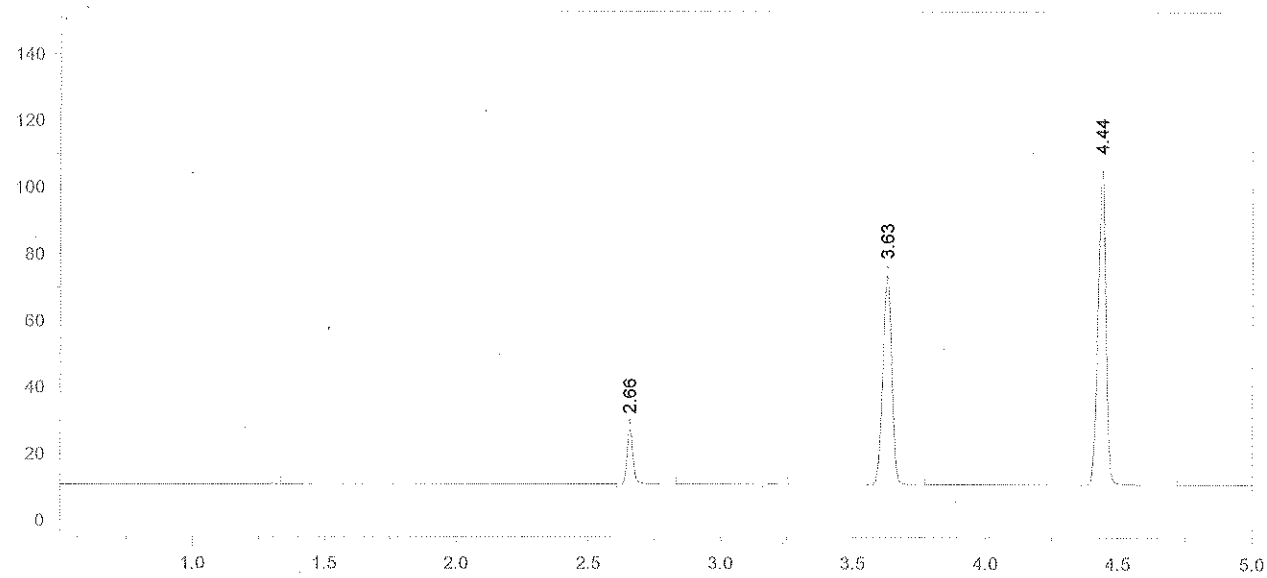
Format File Name = AlcoholVFL.FMT

Today's Date = 11/4/2013
Today's Time = 8:01:58 PM
Bound File Name = SIM11042013.0020.RAW
Sample Name = CCS
Date Taken = 11/4/2013 8:01:49 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	82017	0.0807 *
4	3.63	t-Butanol	148724	1.0289
5	4.43	n-Propanol	194432	1.0000

Avg #19 + #20 = 0.081
KZM 11/5/13

13-17-020 24 KZM

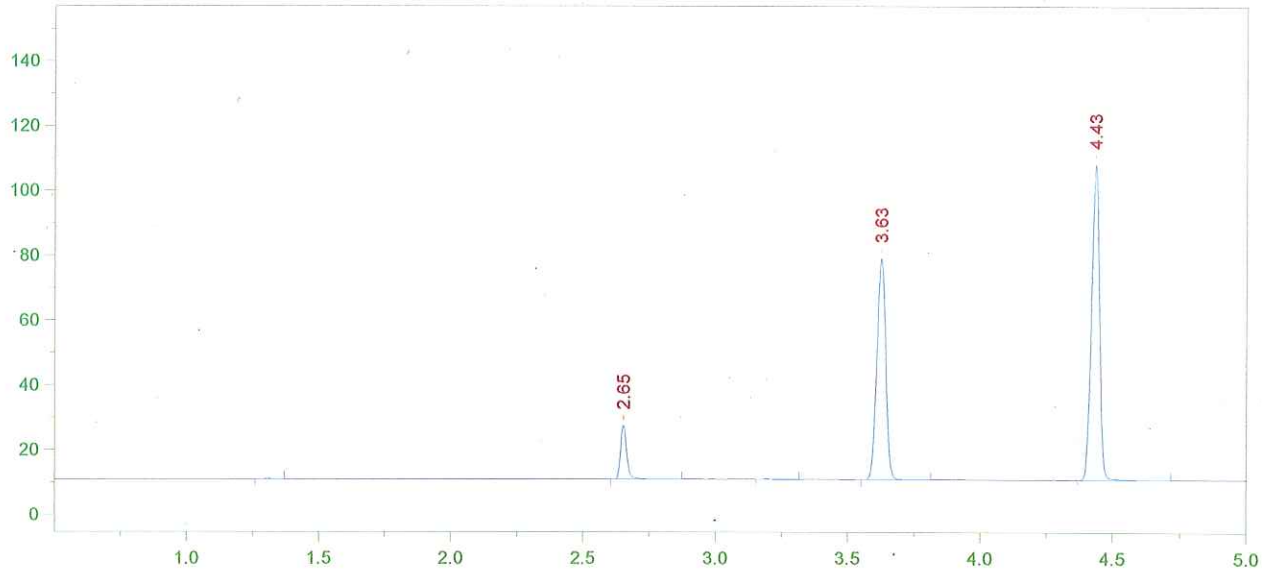


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/4/2013
Today's Time = 8:16:14 PM
Bound File Name = SIM11042013.0021.RAW
Sample Name = 0.02 ALB
Date Taken = 11/4/2013 8:16:10 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	26455	0.0252	0.0205
4	3.63	t-Butanol	145365	0.9730	0.7942
5	4.44	n-Propanol	200964	1.0000	0.8162

13-17-020 25 RLM

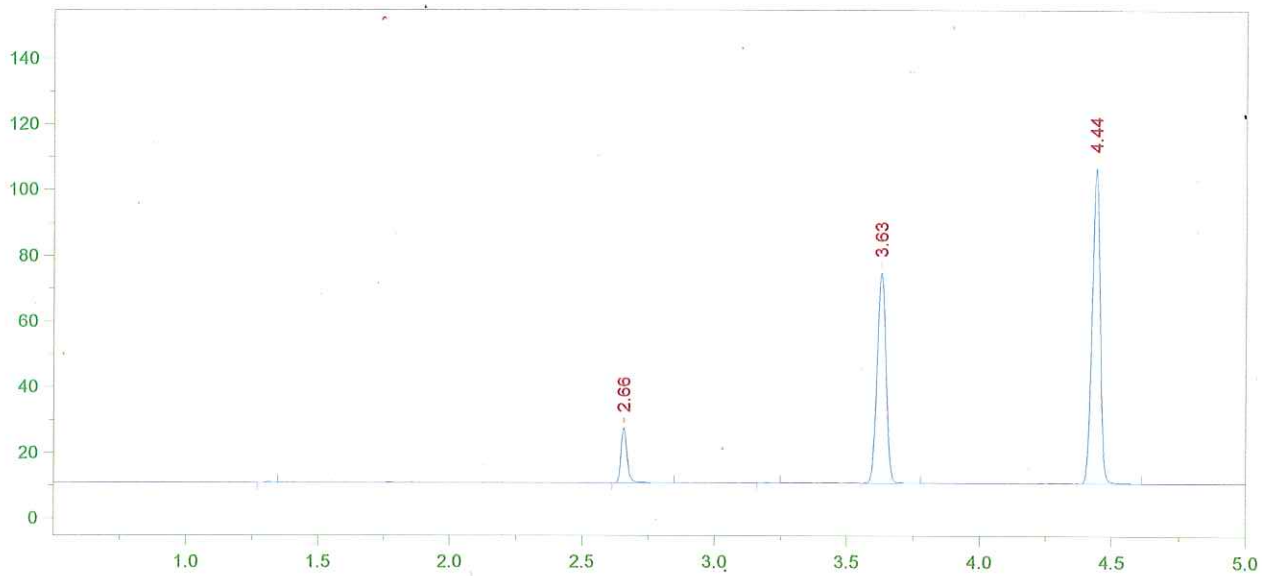


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/4/2013
Today's Time = 8:33:21 PM
Bound File Name = SIM11042013.0022.RAW
Sample Name = 0.02 ALB
Date Taken = 11/4/2013 8:33:14 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	26599	0.0246	0.0201
4	3.63	t-Butanol	158544	1.0303	0.8409
5	4.43	n-Propanol	206991	1.0000	0.8162

13-17-020 26

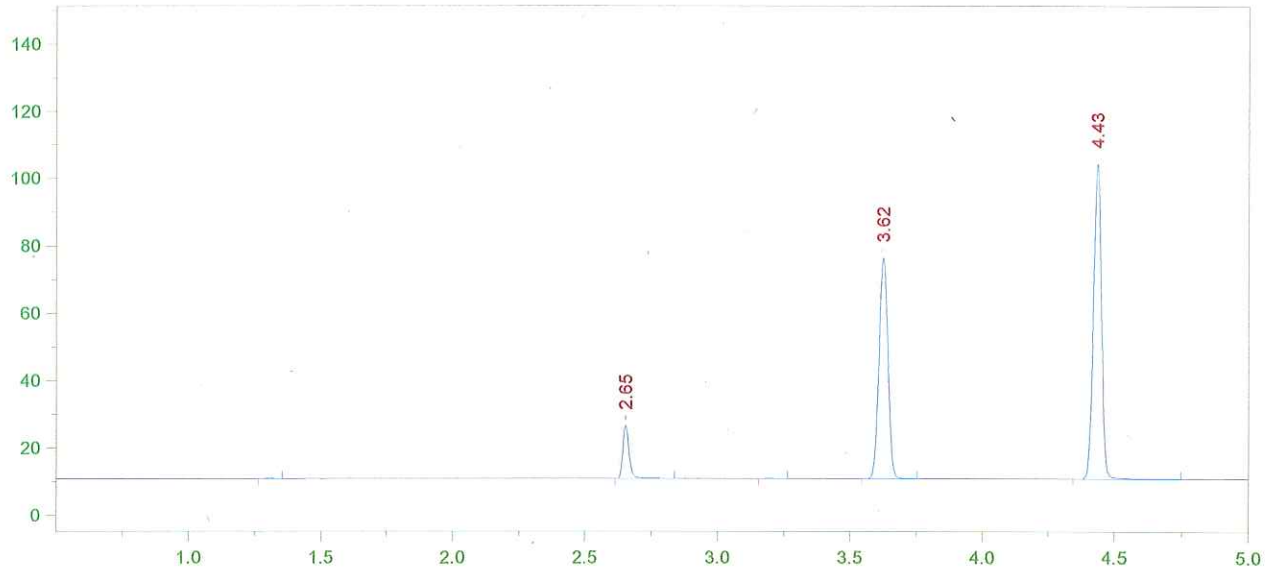


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/4/2013
Today's Time = 8:47:14 PM
Bound File Name = SIM11042013.0023.RAW
Sample Name = 0.02 ALB
Date Taken = 11/4/2013 8:47:06 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	26622	0.0250	0.0204
4	3.63	t-Butanol	148746	0.9815	0.8011
5	4.44	n-Propanol	203853	1.0000	0.8162

13-17-020 27

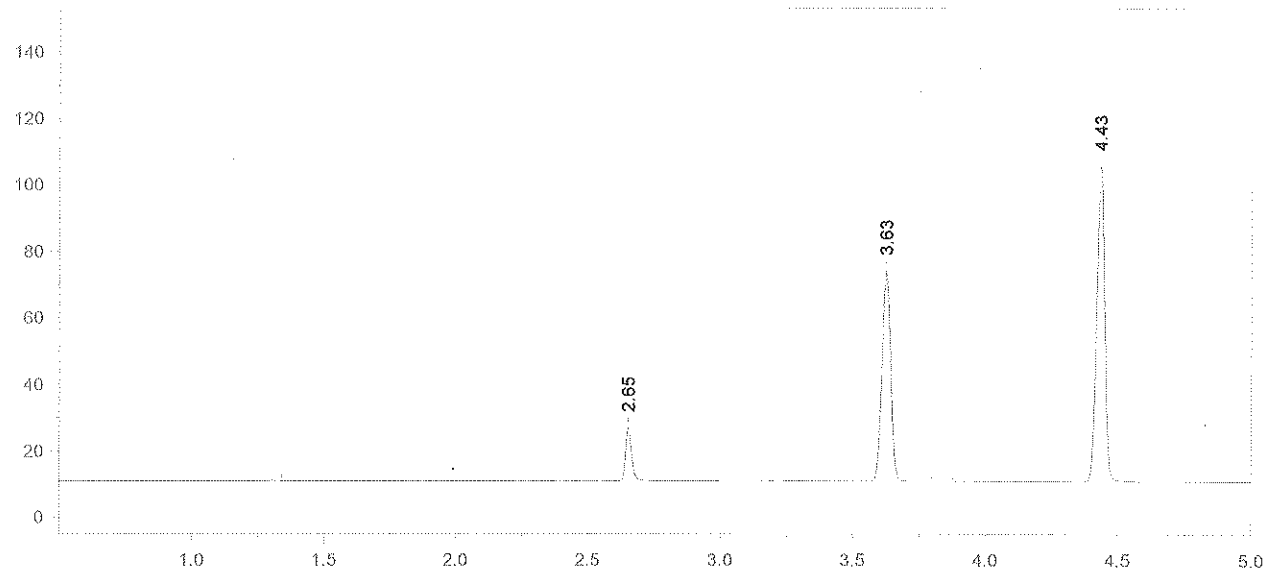


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/4/2013
Today's Time = 9:04:42 PM
Bound File Name = SIM11042013.0024.RAW
Sample Name = 0.02 ALB
Date Taken = 11/4/2013 9:04:38 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	25146	0.0242	0.0197
4	3.62	t-Butanol	152540	1.0309	0.8414
5	4.43	n-Propanol	199045	1.0000	0.8162

13-17-020 28 KLM

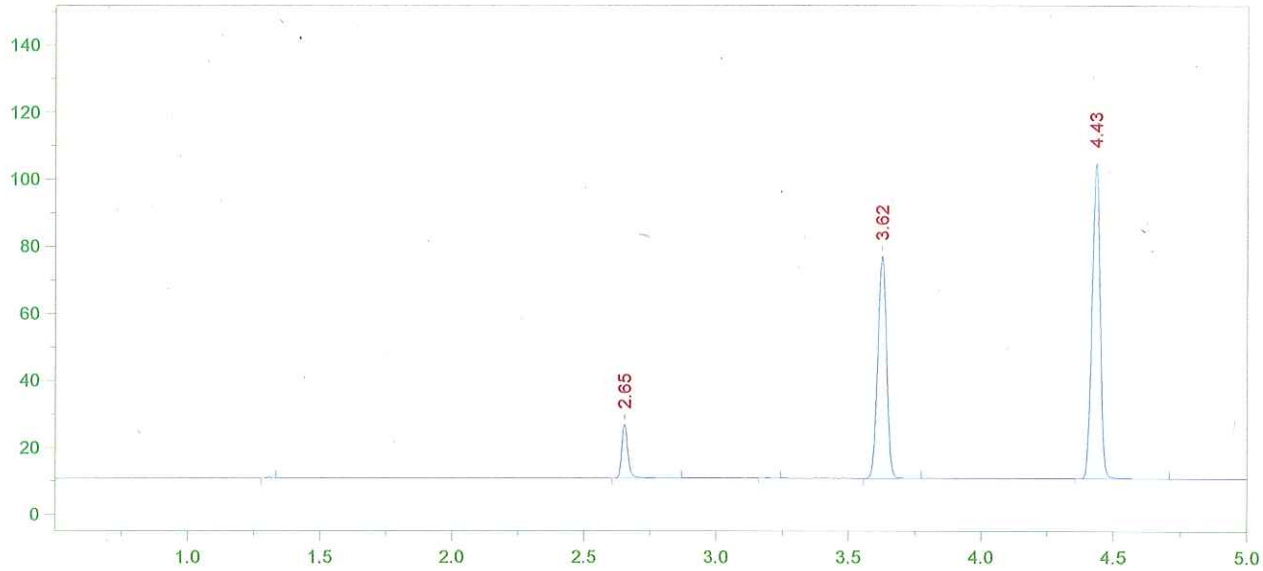


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/4/2013 Today's Time = 9:18:37 PM
Bound File Name = SIM11042013.0025.RAW
Sample Name = 0.02 ALB
Date Taken = 11/4/2013 9:18:31 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11042013.CAL Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	25974	0.0247	0.0201
4	3.63	t-Butanol	146313	0.9776	0.7979
5	4.43	n-Propanol	201325	1.0000	0.8162

13-17-020 29 RLm

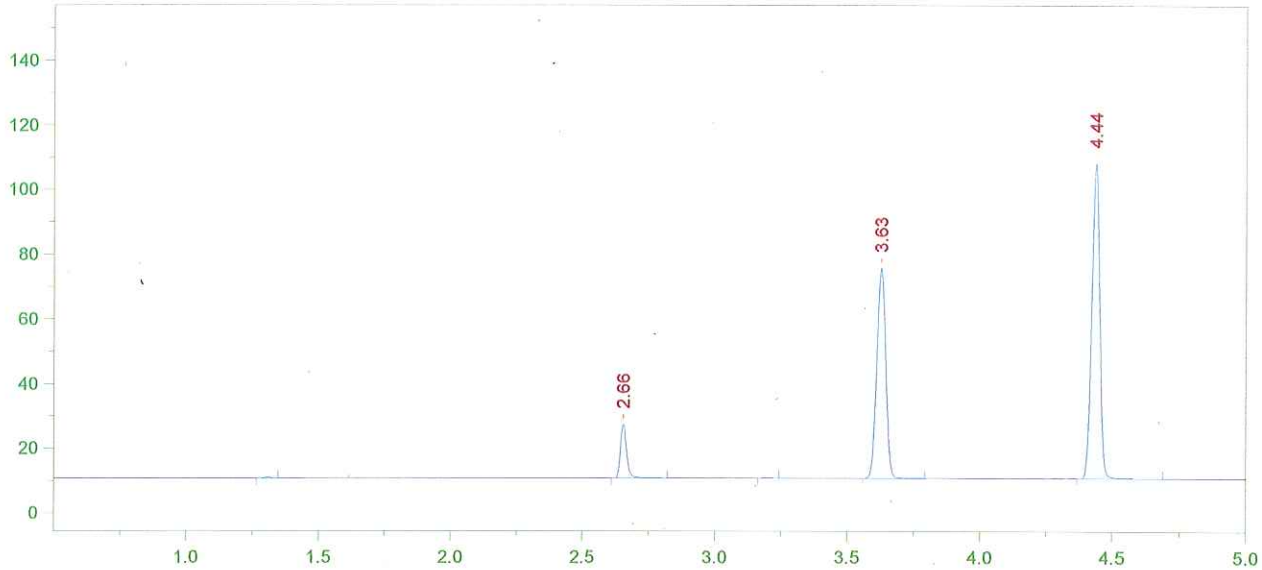


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/4/2013
Today's Time = 9:36:12 PM
Bound File Name = SIM11042013.0026.RAW
Sample Name = 0.02 ALB
Date Taken = 11/4/2013 9:36:02 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	25534	0.0245	0.0200
4	3.62	t-Butanol	153638	1.0370	0.8464
5	4.43	n-Propanol	199285	1.0000	0.8162

13-17-020 30

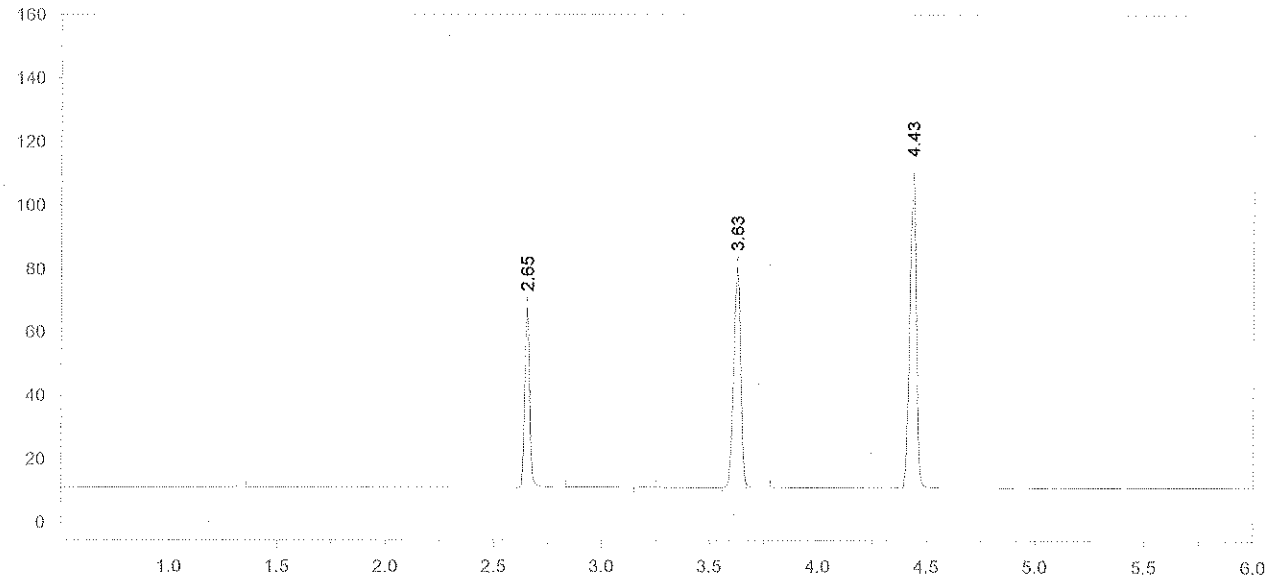


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/4/2013 Today's Time = 9:49:52 PM
Bound File Name = SIM11042013.0027.RAW
Sample Name = 0.02 ALB
Date Taken = 11/4/2013 9:49:45 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11042013.CAL Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	26631	0.0245	0.0200
4	3.63	t-Butanol	150297	0.9741	0.7950
5	4.44	n-Propanol	207550	1.0000	0.8162

13-17-020 31 RZm

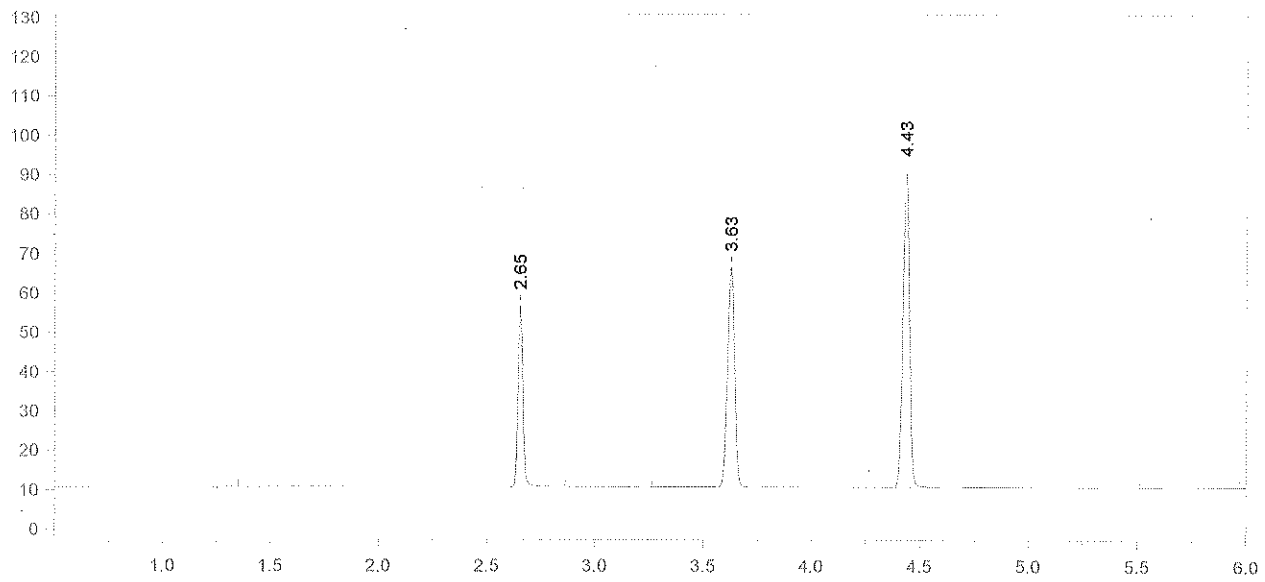


Format File Name = AlcoholVFL.FMT

Today's Date = 11/4/2013
Today's Time = 10:05:51 PM
Bound File Name = SIM11042013.0028.RAW
Sample Name = CCS
Date Taken = 11/4/2013 10:05:46 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	88100	0.0799
4	3.63	t-Butanol	160840	1.0264
5	4.43	n-Propanol	210785	1.0000

13-17-020 32 RM



Format File Name = AlcoholVFL.FMT

Today's Date = 11/4/2013
Today's Time = 10:21:20 PM
Bound File Name = SIM11042013.0029.RAW
Sample Name = CCS
Date Taken = 11/4/2013 10:21:17 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11042013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	72287	0.0811*
4	3.63	t-Butanol	129467	1.0218
5	4.43	n-Propanol	170434	1.0000

Avg #28 + #29 = 0.080
KKM 11/5/13

13-17-020 33 KKM

Headspace Alcohol Analysis Standards Coversheet

Analyst: RLM Date: 11/5/13

TLCA 11/7/2013

Calibration Standards:

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

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

Control Sample:

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

Calibration and Control Sample Data:

Vial No.	Sample Identification		Result	In Range?	Comments
1	Blank		<0.005	(Y) N	
2	Compound Retention Times:			N/A	
		Acetaldehyde	1.91		
		Methanol	2.01		
		Ethanol	2.65		
		Acetone	3.05		
		Isopropanol	3.19		
		T- butanol	3.62		
		n-propanol	4.43		
3	Standard A		0.006	(Y) N	
4	Standard B		0.024	(Y) N	
5	Standard C		0.082	(Y) N	
6	Standard D		0.197	(Y) N	
7	Standard E		0.413	(Y) N	
8	Aqueous QC		0.0793	(Y) N	Avg = 0.079 (99% recovery) ✓
9	Aqueous QC		0.0795	(Y) N	

13-17-020 34 RLM

File Name: C:\Methods\VFL11052013.CAL
Version: 7

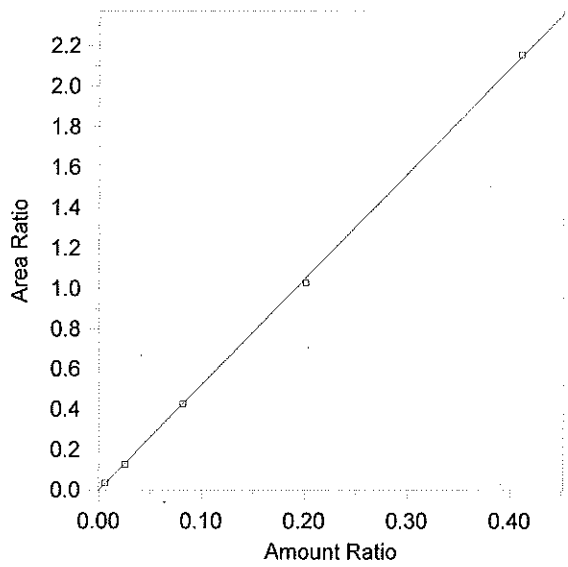
Creator:
Description:
Reason for change:

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:	2.657 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 = 5.217344 X + 0

Linear fit with equal weighting, forced to origin

Coefficient of determination:	0.9997939
Average error:	2.239%
Average CF:	5.20074
RSD:	3.102%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source	Date and time
1	(0.091)	(85146)	--	--	0.091	85146	Manual	8/12/2013 4:03:34 PM
2	0.0063	6997.527	1110719	4.277	0.0063	3.427505E-02	C:\Alcohol Data\SIM11052013\SIM11052013.0003.BND	11/5/2013 4:37:18 PM
3	0.0254	25619.37	1008637	-3.973	0.0254	0.1272551	C:\Alcohol Data\SIM11052013\SIM11052013.0004.BND	11/5/2013 4:54:56 PM
4	0.0822	87334.66	1062465	-0.348	0.0822	0.4273734	C:\Alcohol Data\SIM11052013\SIM11052013.0005.BND	11/5/2013 5:08:55 PM
5	0.2012	205119	1019478	-2.071	0.2012	1.027993	C:\Alcohol Data\SIM11052013\SIM11052013.0006.BND	11/5/2013 5:26:17 PM
6	0.4112	433443.2	1054093	0.524	0.4112	2.15661	C:\Alcohol Data\SIM11052013\SIM11052013.0007.BND	11/5/2013 5:39:32 PM

13-17-020 35

File Name = C:\Alcohol Data\SIM11052013\SIM11052013.SEQ
Version = 1
File Date = 11/5/2013 3:30:07 PM

Entry #	Raw File Name	Method File Name	Sample Name	Sample Wt.	Int. Std. Amount
1	SIM11052013.0001.raw	Blood Alc temp VFL.MET	Blank	1.00	1.00
2	SIM11052013.0002.raw	Blood Alc temp VFL.MET	TMX	1.00	1.00
3	SIM11052013.0003.raw	Blood Alc temp VFL.MET	STD A	1.00	1.00
4	SIM11052013.0004.raw	Blood Alc temp VFL.MET	STD B	1.00	1.00
5	SIM11052013.0005.raw	Blood Alc temp VFL.MET	STD C	1.00	1.00
6	SIM11052013.0006.raw	Blood Alc temp VFL.MET	STD D	1.00	1.00
7	SIM11052013.0007.raw	Blood Alc temp VFL.MET	STD E	1.00	1.00
8	SIM11052013.0008.raw	Blood Alc temp VFL.MET	AQ QC	1.00	1.00
9	SIM11052013.0009.raw	Blood Alc temp VFL.MET	AQ QC	1.00	1.00
10	SIM11052013.0010.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
11	SIM11052013.0011.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
12	SIM11052013.0012.raw	simsoln.met	0.02 RLM	1.00	1.00
13	SIM11052013.0013.raw	simsoln.met	0.02 RLM	1.00	1.00
14	SIM11052013.0014.raw	simsoln.met	0.02 RLM	1.00	1.00
15	SIM11052013.0015.raw	simsoln.met	0.02 RLM	1.00	1.00
16	SIM11052013.0016.raw	simsoln.met	0.02 RLM	1.00	1.00
17	SIM11052013.0017.raw	simsoln.met	0.02 RLM	1.00	1.00
18	SIM11052013.0018.raw	simsoln.met	0.02 RLM	1.00	1.00
19	SIM11052013.0019.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
20	SIM11052013.0020.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
21	SIM11052013.0021.raw	simsoln.met	0.02 ALB	1.00	1.00
22	SIM11052013.0022.raw	simsoln.met	0.02 ALB	1.00	1.00
23	SIM11052013.0023.raw	simsoln.met	0.02 ALB	1.00	1.00
24	SIM11052013.0024.raw	simsoln.met	0.02 ALB	1.00	1.00
25	SIM11052013.0025.raw	simsoln.met	0.02 ALB	1.00	1.00
26	SIM11052013.0026.raw	simsoln.met	0.02 ALB	1.00	1.00
27	SIM11052013.0027.raw	simsoln.met	0.02 ALB	1.00	1.00
28	SIM11052013.0028.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
29	SIM11052013.0029.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00

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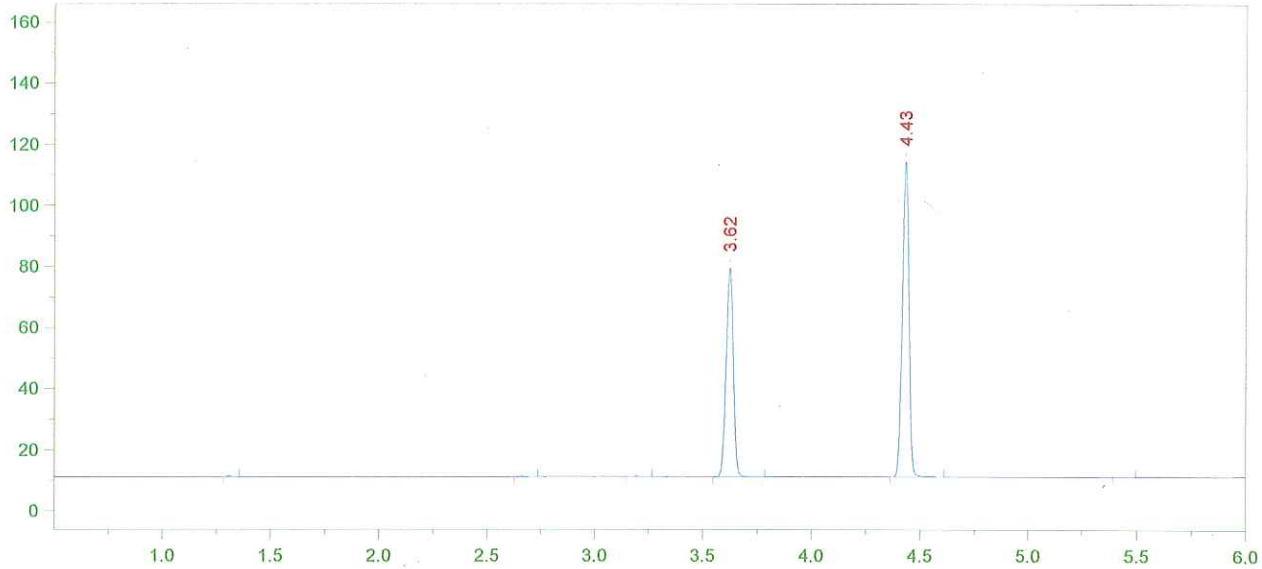
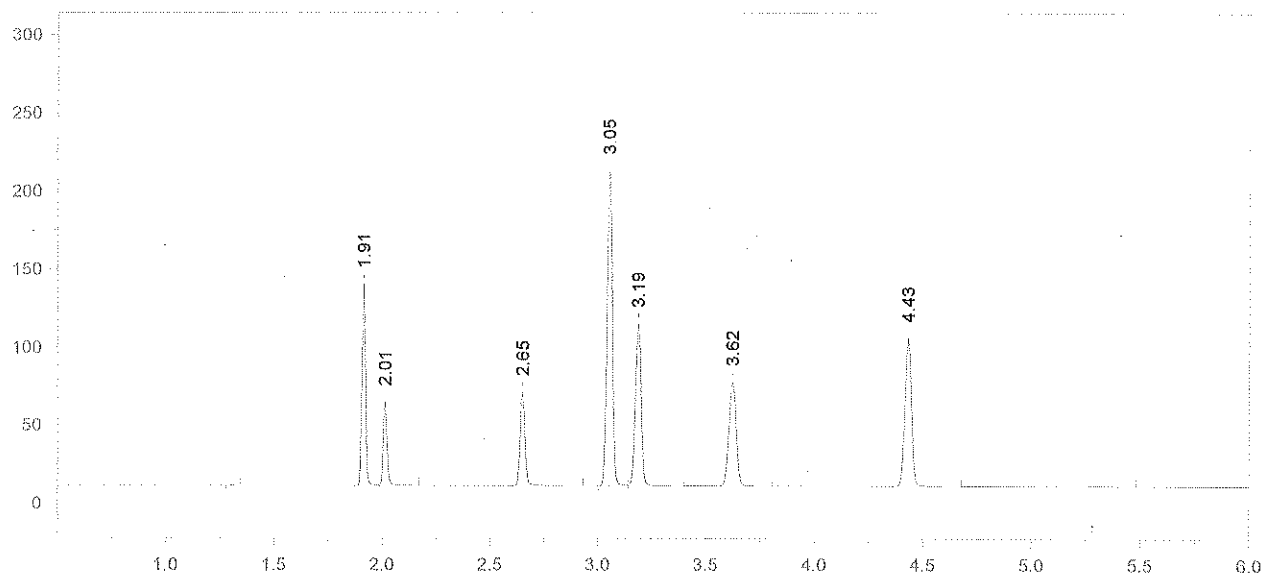


Format File Name = AlcoholVFL.FMT

Today's Date = 11/6/2013
Today's Time = 7:59:28 AM
Bound File Name = SIM11052013.0001.RAW
Sample Name = Blank
Date Taken = 11/5/2013 4:06:00 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
4	3.62	t-Butanol	157981	0.9594
5	4.43	n-Propanol	220314	1.0000

13-17-020 37

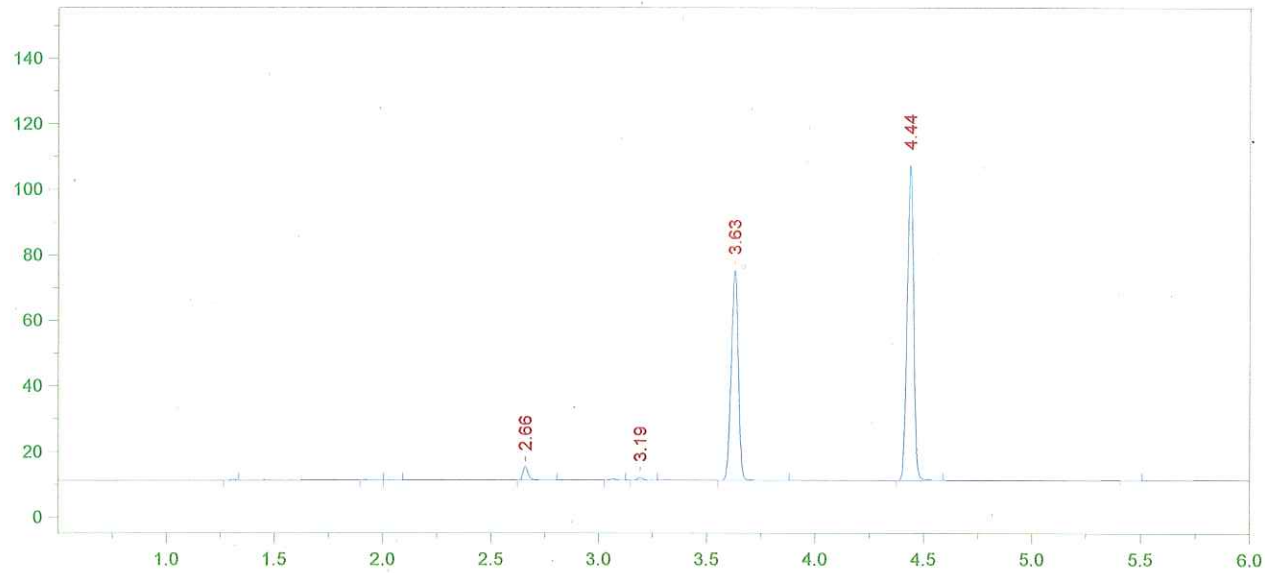


Format File Name = AlcoholVFL.FMT

Today's Date = 11/6/2013
Today's Time = 7:59:34 AM
Bound File Name = SIM11052013.0002.RAW
Sample Name = TMX
Date Taken = 11/5/2013 4:23:21 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	1.91	Acetaldehyde	150741	0.0520
3	2.01	Methanol	67764	0.1370
4	2.65	Ethanol	94400	0.0898
5	3.05	Acetone	346001	0.0940
6	3.19	Isopropanol	194174	0.0850
7	3.62	t-Butanol	154716	1.0268
8	4.43	n-Propanol	201593	1.0000

13-17-020 38 RKM

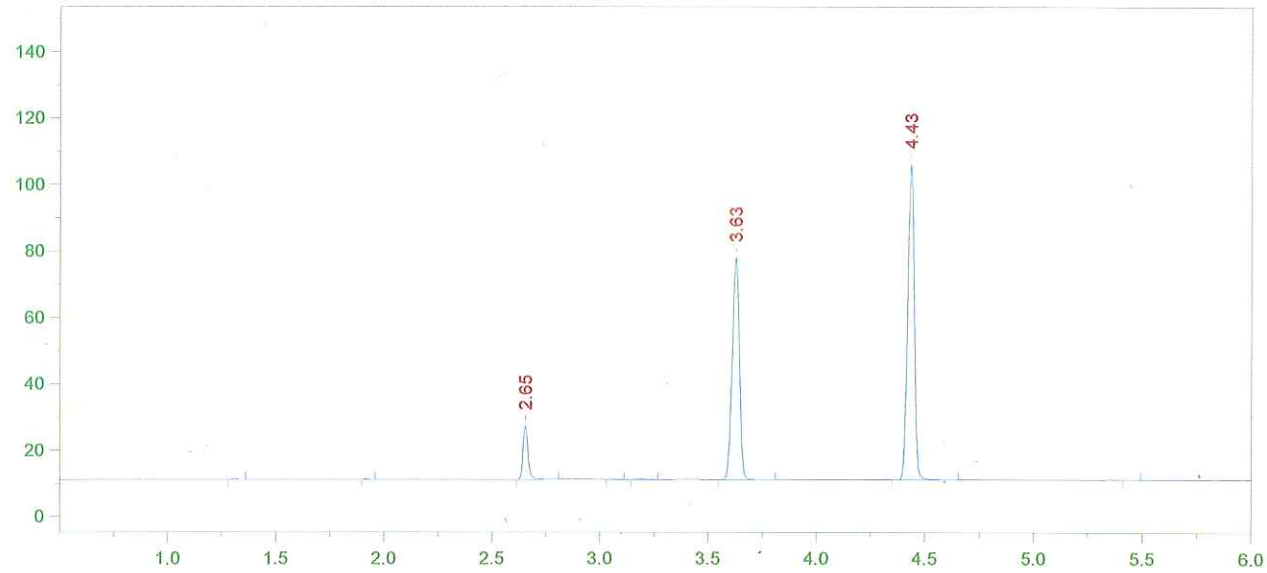


Format File Name = AlcoholVFL.FMT

Today's Date = 11/6/2013
Today's Time = 7:59:39 AM
Bound File Name = SIM11052013.0003.RAW
Sample Name = STD A
Date Taken = 11/5/2013 4:37:09 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
4	2.66	Ethanol	06998	0.0066 *
6	3.19	Isopropanol	01586	<0.004
7	3.63	t-Butanol	148536	0.9734
8	4.44	n-Propanol	204158	1.0000

13-17-020 39 RLM

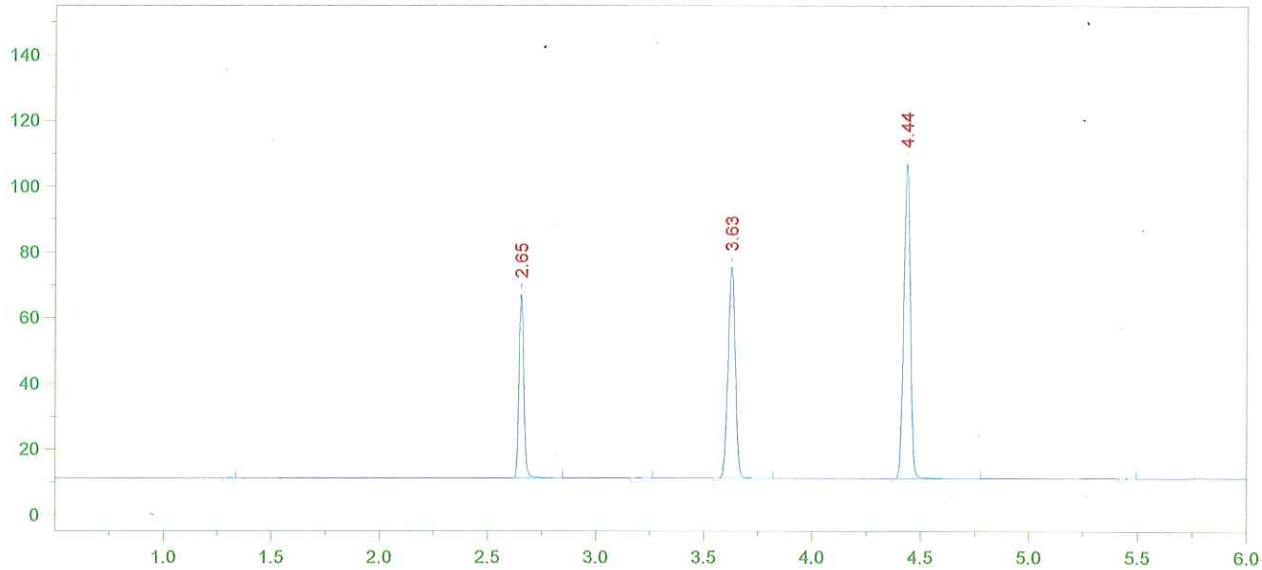


Format File Name = AlcoholVFL.FMT

Today's Date = 11/6/2013
Today's Time = 7:59:45 AM
Bound File Name = SIM11052013.0004.RAW
Sample Name = STD B
Date Taken = 11/5/2013 4:54:46 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.65	Ethanol	25619	0.0244 *
6	3.63	t-Butanol	154247	1.0251
7	4.43	n-Propanol	201323	1.0000

13-17-020 40 [illegible]

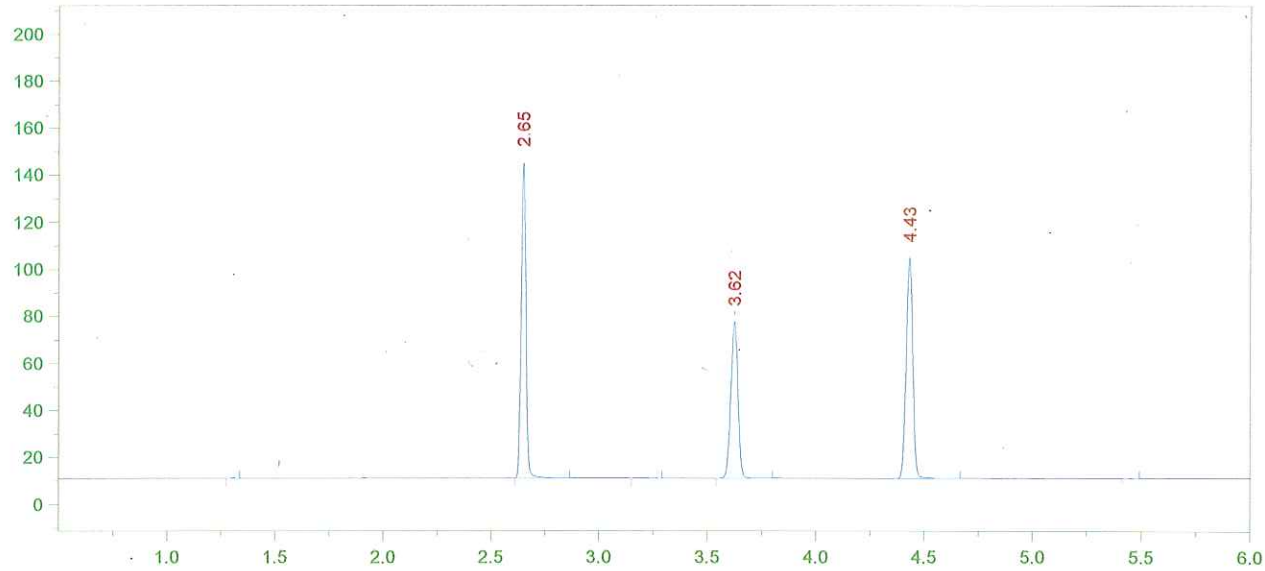


Format File Name = AlcoholVFL.FMT

Today's Date = 11/6/2013
Today's Time = 7:59:52 AM
Bound File Name = SIM11052013.0005.RAW
Sample Name = STD C
Date Taken = 11/5/2013 5:08:46 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	87335	0.0819 *
4	3.63	t-Butanol	149041	0.9758
5	4.44	n-Propanol	204352	1.0000

13-17-020 41 RLM

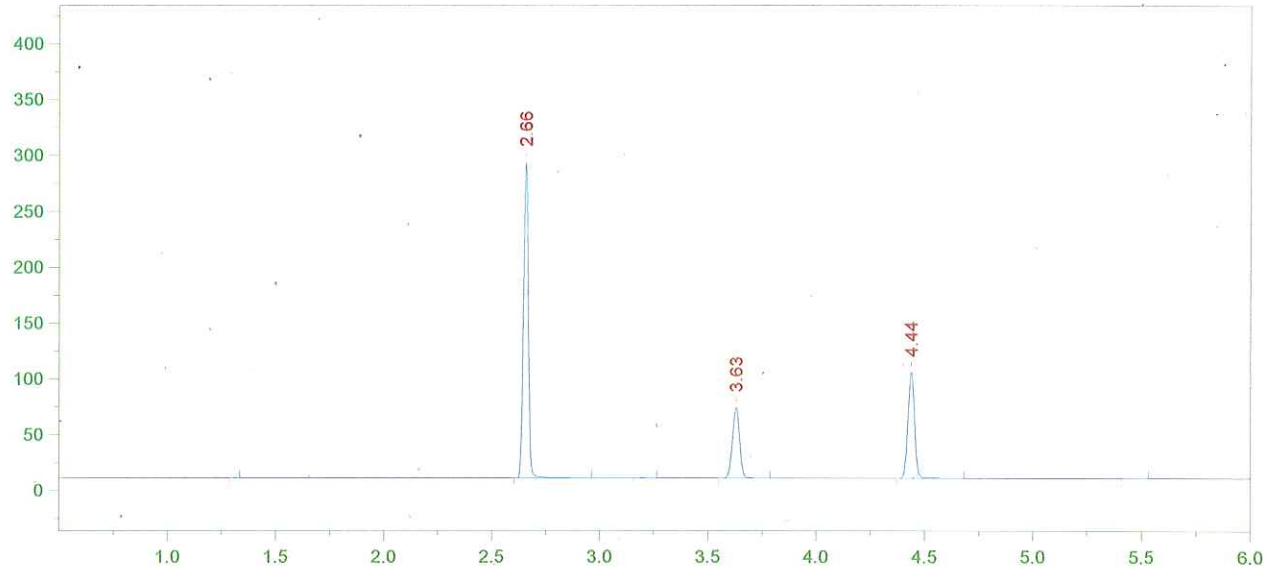


Format File Name = AlcoholVFL.FMT

Today's Date = 11/6/2013
Today's Time = 7:59:58 AM
Bound File Name = SIM11052013.0006.RAW
Sample Name = STD D
Date Taken = 11/5/2013 5:26:12 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	205119	0.1970 *
4	3.62	t-Butanol	153710	1.0307
5	4.43	n-Propanol	199534	1.0000

13-17-020 42

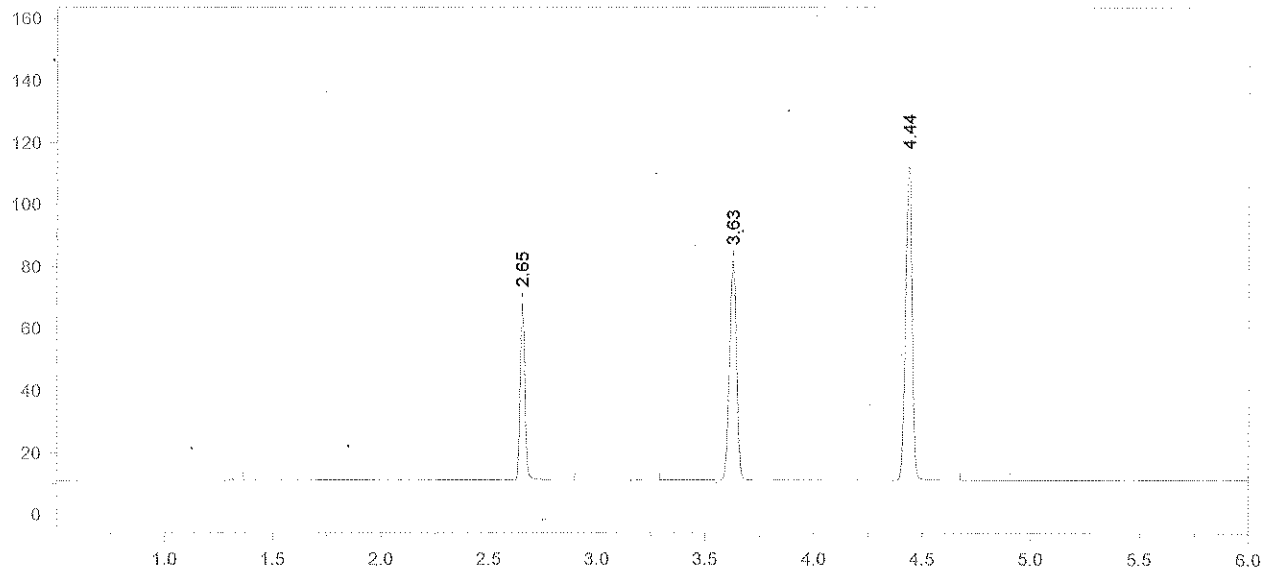


Format File Name = AlcoholVFL.FMT

Today's Date = 11/6/2013
Today's Time = 8:00:03 AM
Bound File Name = SIM11052013.0007.RAW
Sample Name = STD E
Date Taken = 11/5/2013 5:39:28 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	433443	0.4134 *
4	3.63	t-Butanol	145436	0.9682
5	4.44	n-Propanol	200984	1.0000

13-17-020 43 RKM

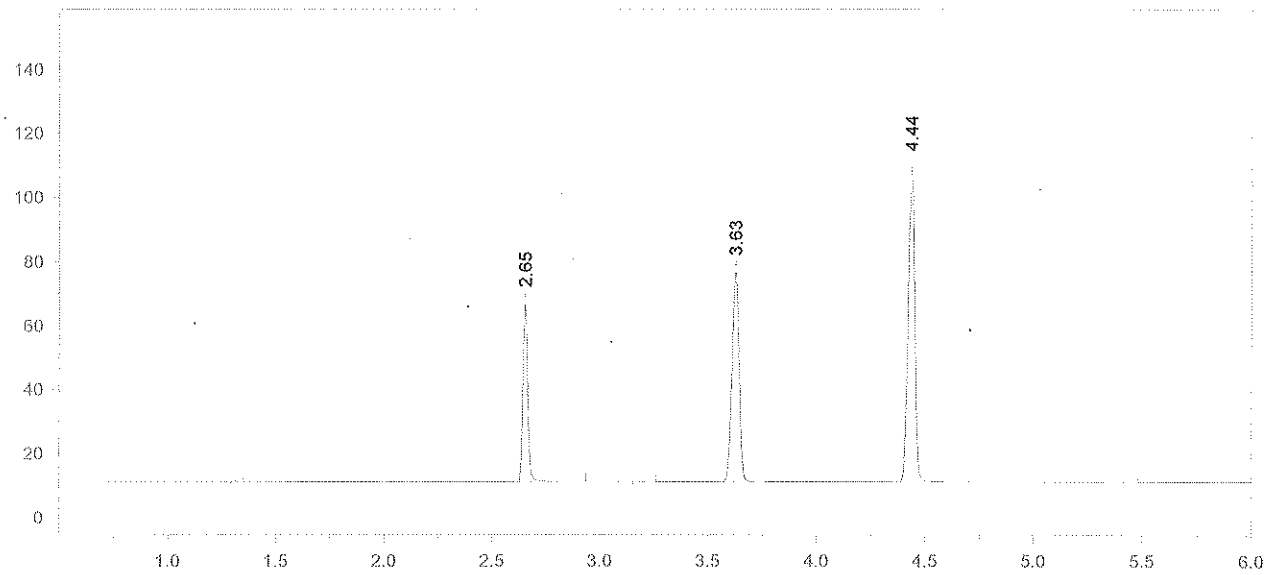


Format File Name = AlcoholVFL.FMT

Today's Date = 11/5/2013
Today's Time = 5:56:02 PM
Bound File Name = SIM11052013.0008.RAW
Sample Name = AQ QC
Date Taken = 11/5/2013 5:55:56 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	89192	0.0793 *
4	3.63	t-Butanol	163680	1.0161
5	4.44	n-Propanol	215531	1.0000

13-17-020 44



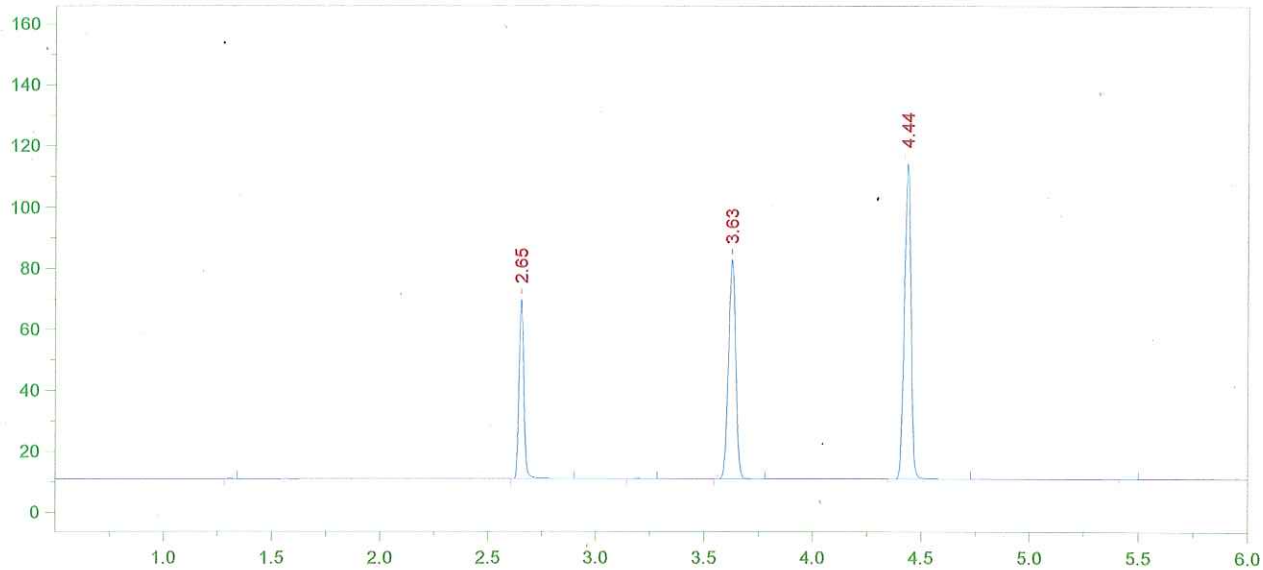
Format File Name = AlcoholVFL.FMT

Today's Date = 11/5/2013
Today's Time = 6:11:31 PM
Bound File Name = SIM11052013.0009.RAW
Sample Name = AQ QC
Date Taken = 11/5/2013 6:11:25 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	86966	0.0795 *
4	3.63	t-Butanol	152231	0.9718
5	4.44	n-Propanol	209589	1.0000

Avg #8 + #9 = 0.079
RLM 11/6/13

13-17-020 45 RLM

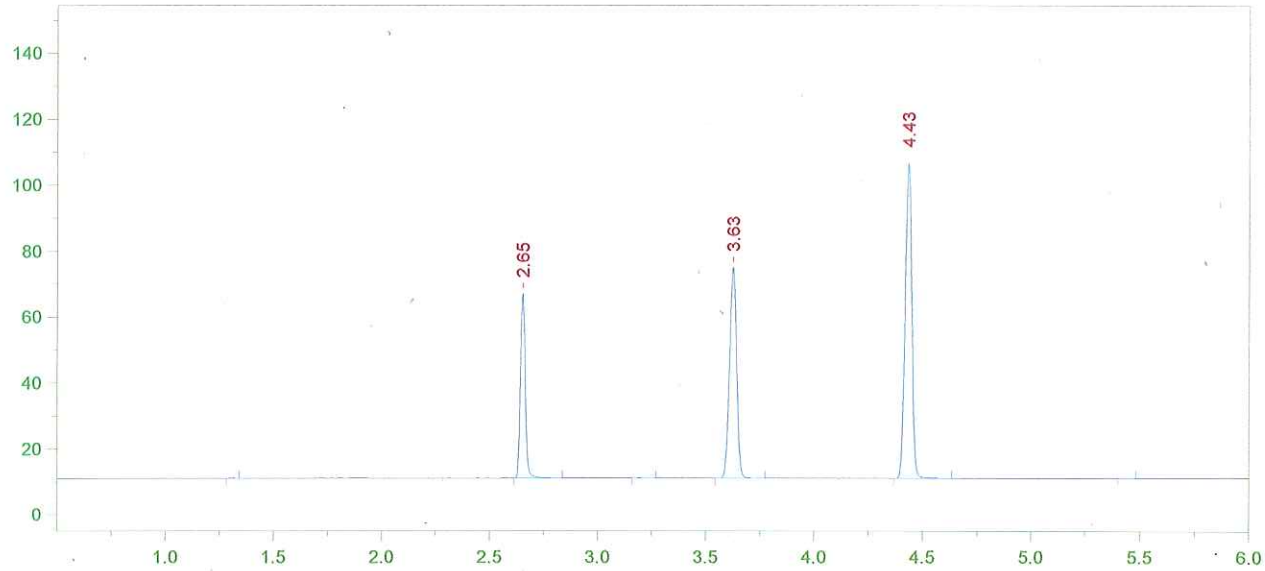


Format File Name = AlcoholVFL.FMT

Today's Date = 11/5/2013
Today's Time = 6:25:53 PM
Bound File Name = SIM11052013.0010.RAW
Sample Name = CCS
Date Taken = 11/5/2013 6:25:48 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	91450	0.0803 *
4	3.63	t-Butanol	165928	1.0170
5	4.44	n-Propanol	218284	1.0000

13-17-020 46



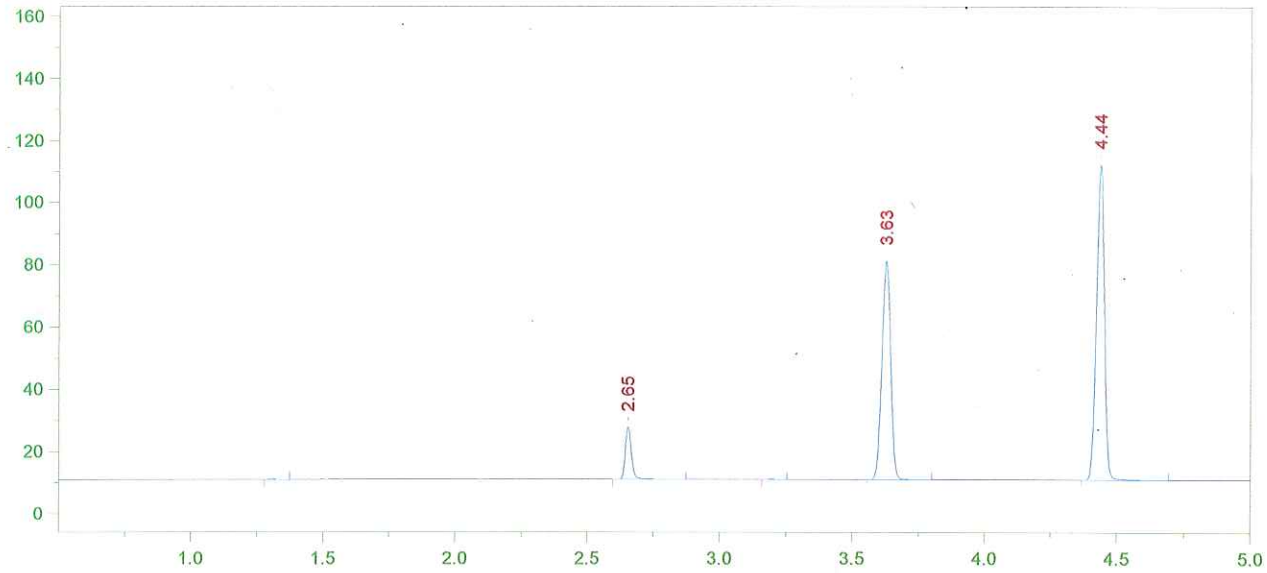
Format File Name = AlcoholVFL.FMT

Today's Date = 11/5/2013
Today's Time = 6:41:52 PM
Bound File Name = SIM11052013.0011.RAW
Sample Name = CCS
Date Taken = 11/5/2013 6:41:42 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	87012	0.0820 *
4	3.63	t-Butanol	147856	0.9731
5	4.43	n-Propanol	203292	1.0000

Avg #10 + #11 = 0.081
RZM 11/6/13

13-17-020 47 RZM

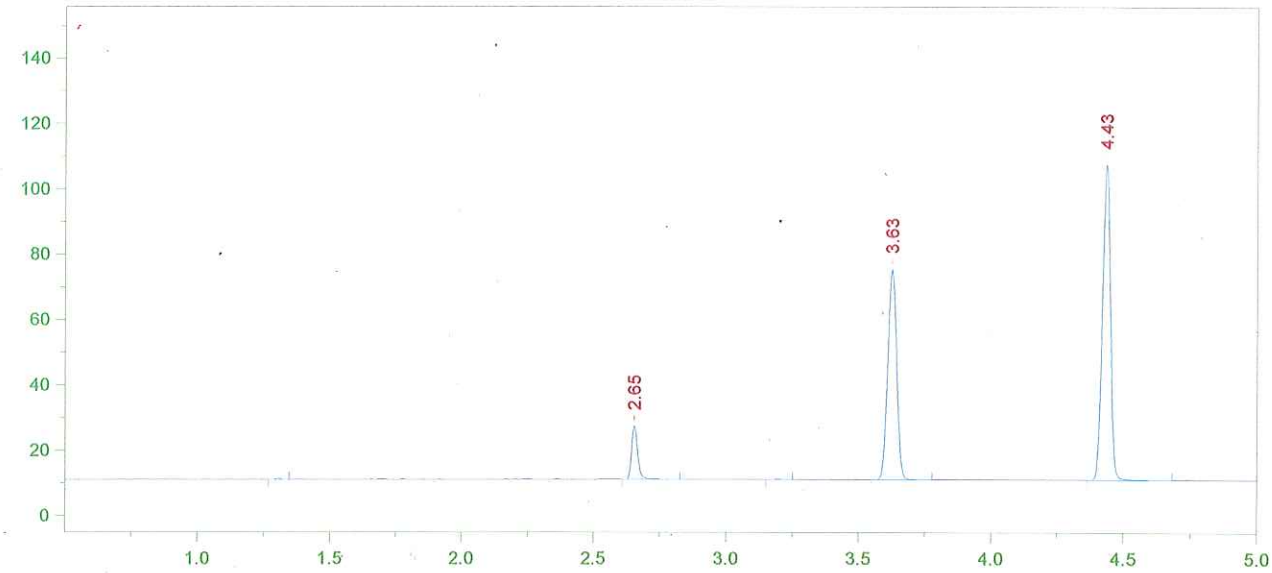


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/5/2013
Today's Time = 6:56:10 PM
Bound File Name = SIM11052013.0012.RAW
Sample Name = 0.02 RLM
Date Taken = 11/5/2013 6:56:02 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	27055	0.0241	0.0197
4	3.63	t-Butanol	163044	1.0159	0.8291
5	4.44	n-Propanol	214738	1.0000	0.8162

13-17-020 48 RLM

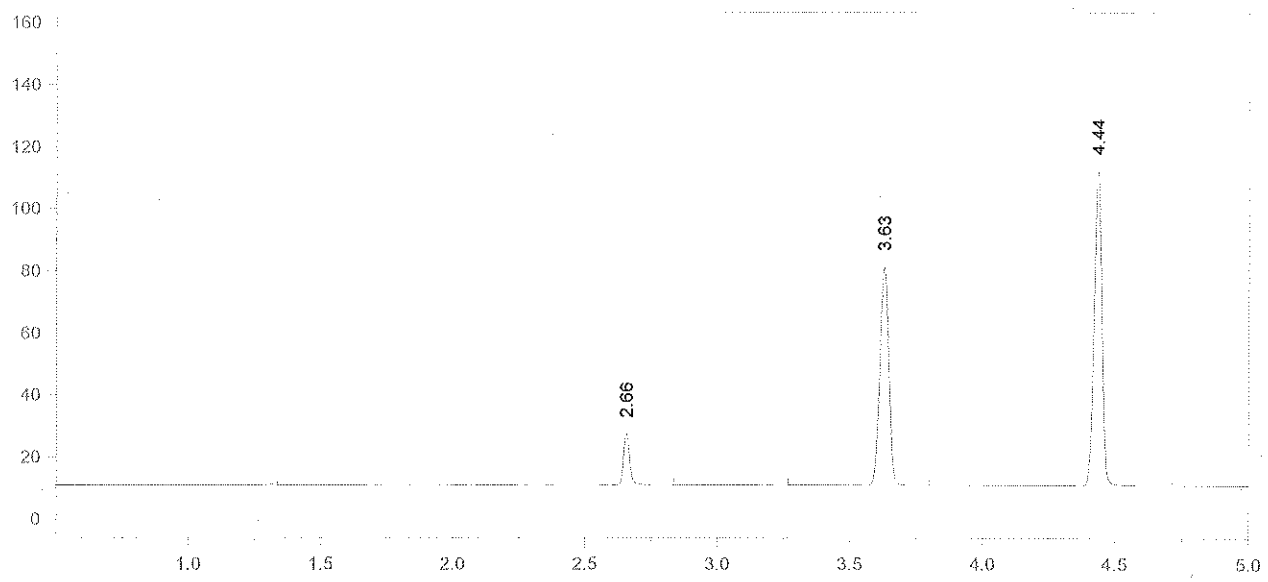


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/5/2013
Today's Time = 7:12:09 PM
Bound File Name = SIM11052013.0013.RAW
Sample Name = 0.02 RLM
Date Taken = 11/5/2013 7:12:01 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	26146	0.0244	0.0199
4	3.63	t-Butanol	148936	0.9710	0.7925
5	4.43	n-Propanol	205226	1.0000	0.8162

13-17-020 49 [illegible]

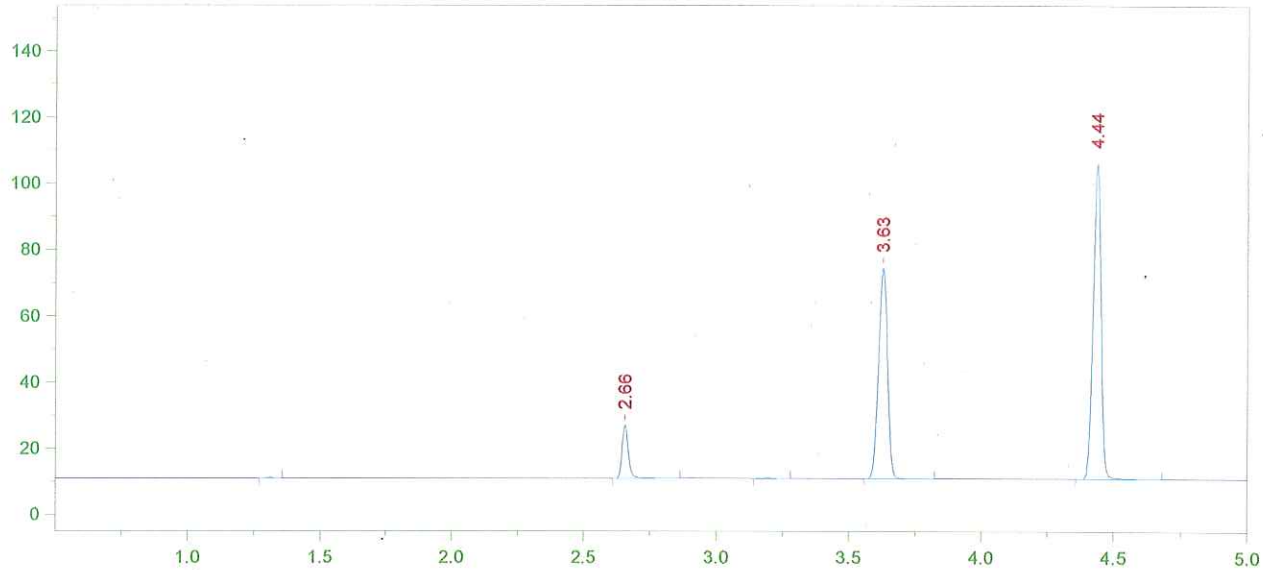


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/5/2013
Today's Time = 7:26:30 PM
Bound File Name = SIM11052013.0014.RAW
Sample Name = 0.02 RLM
Date Taken = 11/5/2013 7:26:26 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	26761	0.0239	0.0195
4	3.63	t-Butanol	162950	1.0150	0.8284
5	4.44	n-Propanol	214802	1.0000	0.8162

13-17-020 50

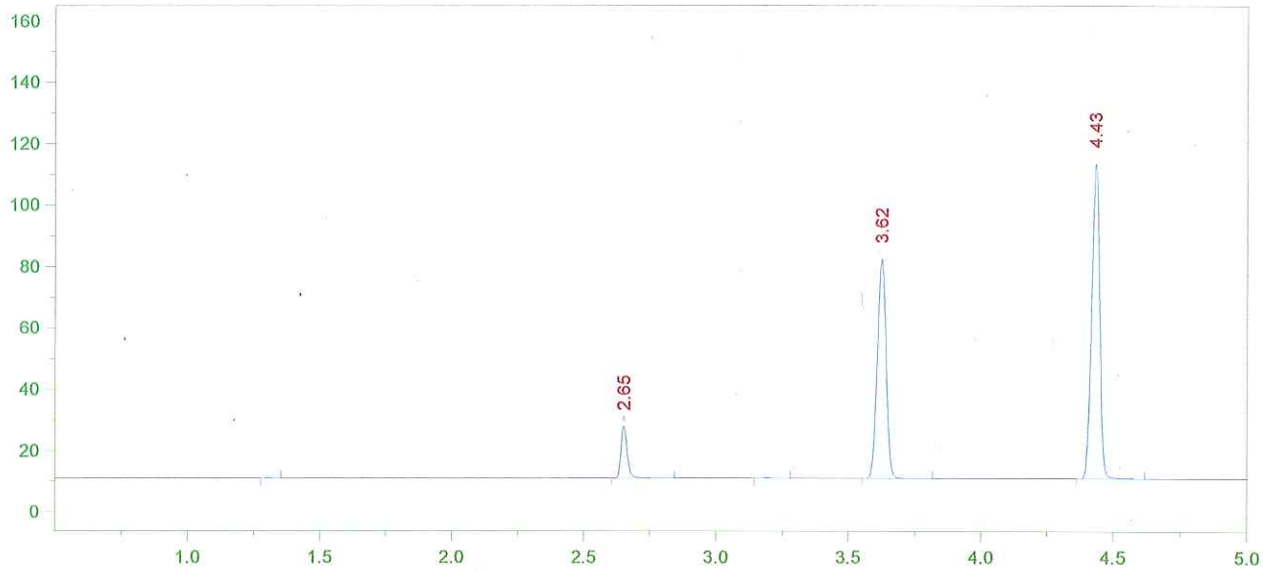


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/5/2013
Today's Time = 7:42:24 PM
Bound File Name = SIM11052013.0015.RAW
Sample Name = 0.02 RLM
Date Taken = 11/5/2013 7:42:17 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	25731	0.0244	0.0199
4	3.63	t-Butanol	147457	0.9755	0.7962
5	4.44	n-Propanol	202254	1.0000	0.8162

13-17-020 51 RZM

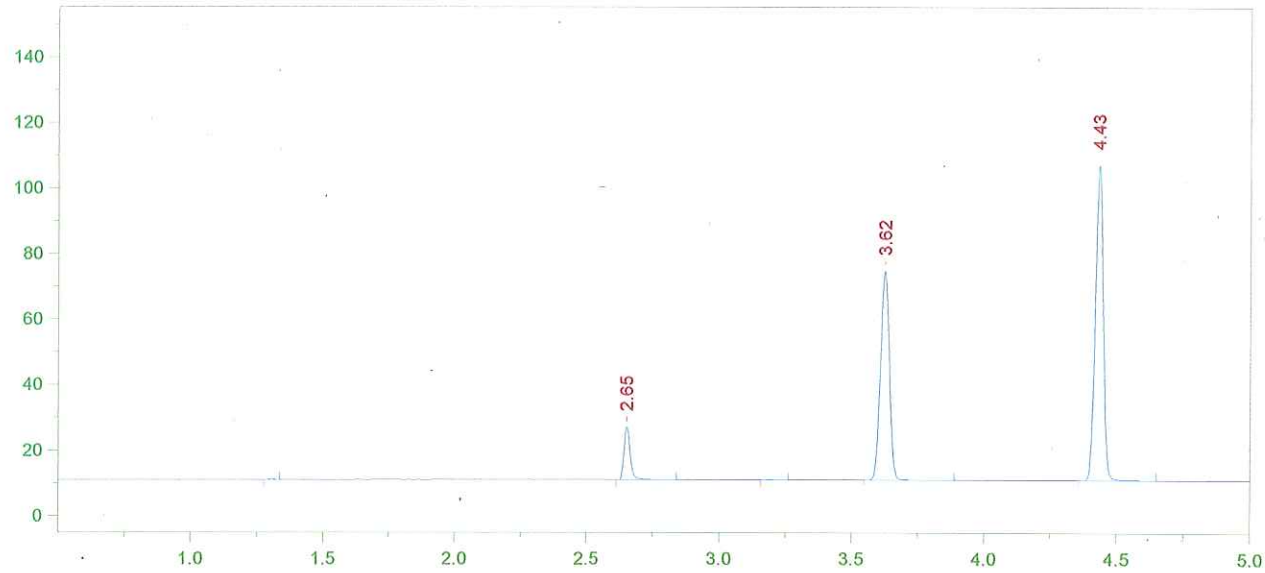


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/5/2013
Today's Time = 7:56:47 PM
Bound File Name = SIM11052013.0016.RAW
Sample Name = 0.02 RLM
Date Taken = 11/5/2013 7:56:38 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	27202	0.0238	0.0195
4	3.62	t-Butanol	166045	1.0160	0.8292
5	4.43	n-Propanol	218669	1.0000	0.8162

13-17-020 52

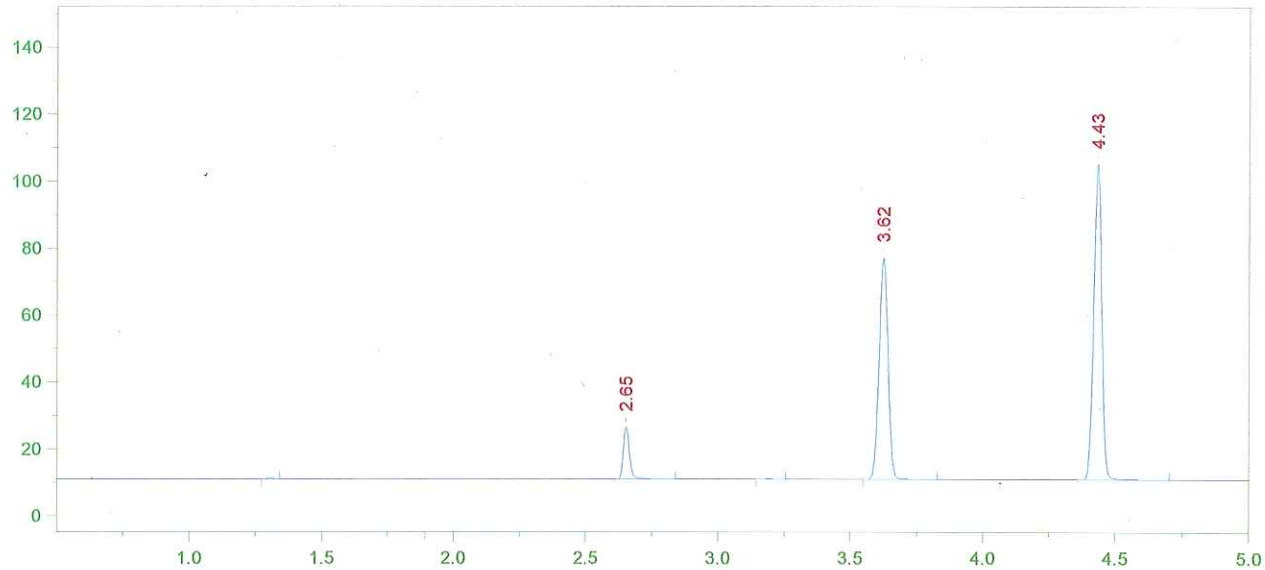


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/5/2013
Today's Time = 8:12:09 PM
Bound File Name = SIM11052013.0017.RAW
Sample Name = 0.02 RLM
Date Taken = 11/5/2013 8:12:01 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	25726	0.0242	0.0197
4	3.62	t-Butanol	148096	0.9719	0.7933
5	4.43	n-Propanol	203872	1.0000	0.8162

13-17-020 53 RZM

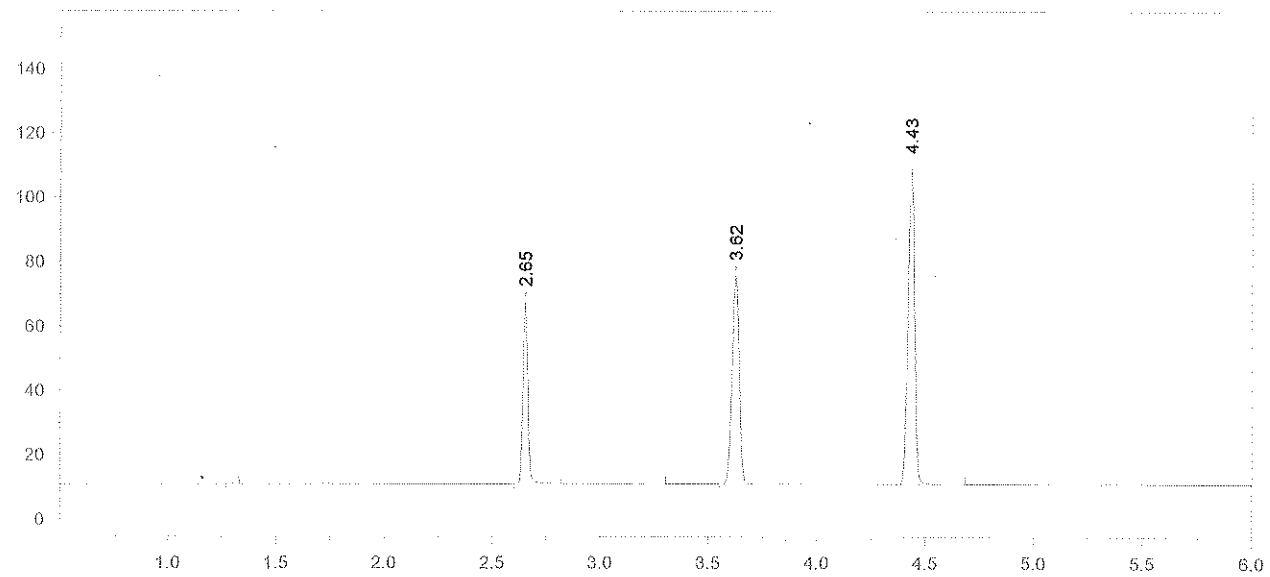


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/5/2013
Today's Time = 8:28:44 PM
Bound File Name = SIM11052013.0018.RAW
Sample Name = 0.02 RLM
Date Taken = 11/5/2013 8:28:37 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	25022	0.0239	0.0195
4	3.62	t-Butanol	153188	1.0209	0.8332
5	4.43	n-Propanol	200763	1.0000	0.8162

13-17-020 54 KLM

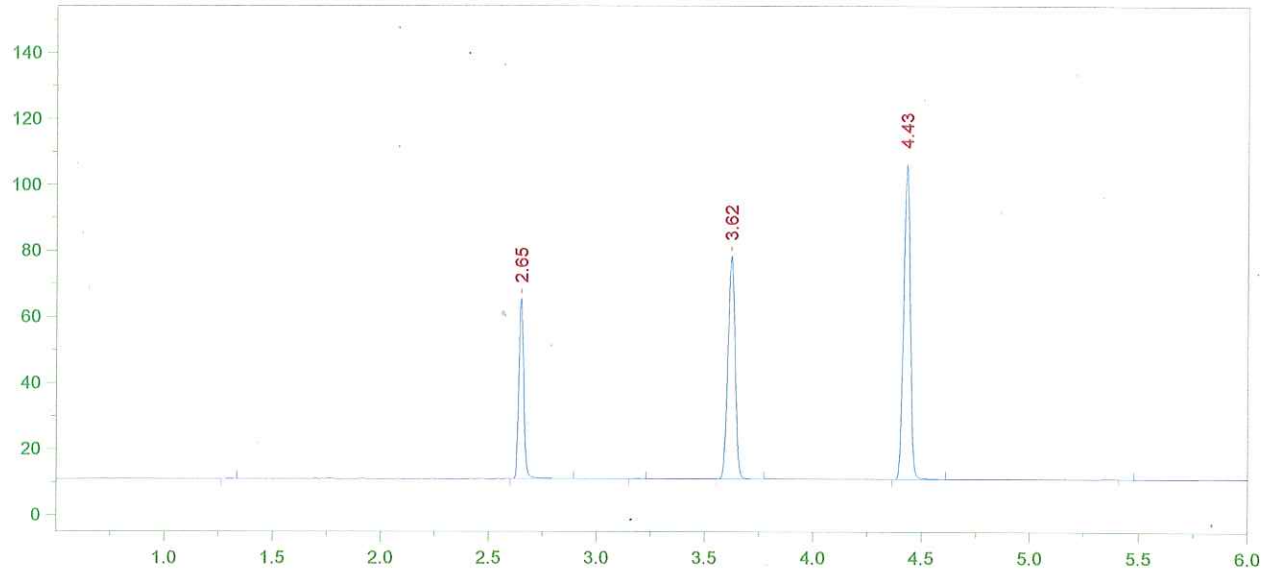


Format File Name = AlcoholVFL.FMT

Today's Date = 11/5/2013
Today's Time = 8:42:48 PM
Bound File Name = SIM11052013.0019.RAW
Sample Name = CCS
Date Taken = 11/5/2013 8:42:40 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	88117	0.0813
4	3.62	t-Butanol	150477	0.9687
5	4.43	n-Propanol	207842	1.0000

13-17-020 55 RKM



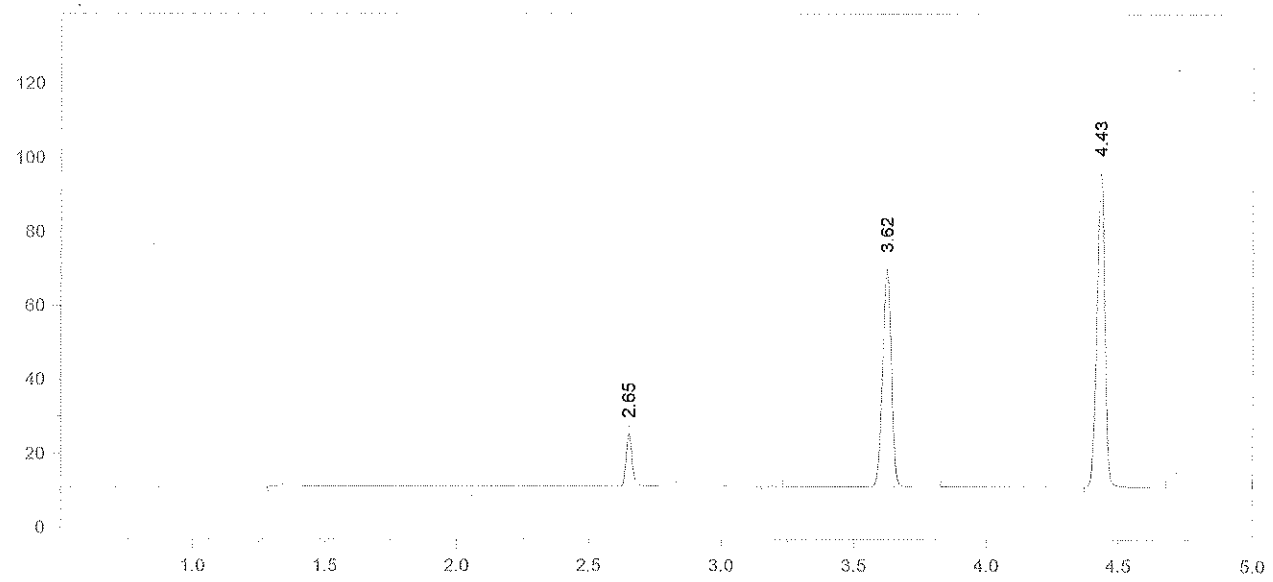
Format File Name = AlcoholVFL.FMT

Today's Date = 11/5/2013
Today's Time = 9:00:09 PM
Bound File Name = SIM11052013.0020.RAW
Sample Name = CCS
Date Taken = 11/5/2013 9:00:02 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	85242	0.0806 *
4	3.62	t-Butanol	155808	1.0286
5	4.43	n-Propanol	202669	1.0000

Avg #19 & #20 = 0.081
TKM 11/6/13

13-17-020 56 TKM

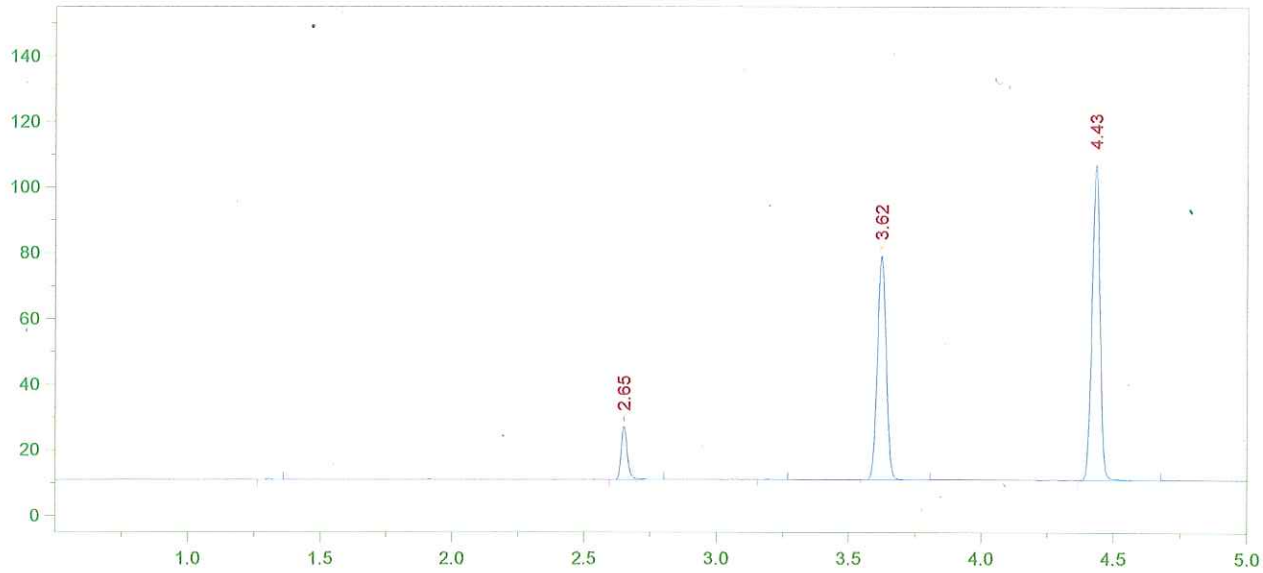


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/5/2013
Today's Time = 9:14:49 PM
Bound File Name = SIM11052013.0021.RAW
Sample Name = 0.02 ALB
Date Taken = 11/5/2013 9:14:45 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	22818	0.0241	0.0197
4	3.62	t-Butanol	136992	1.0105	0.8248
5	4.43	n-Propanol	181385	1.0000	0.8162

13-17-020 57

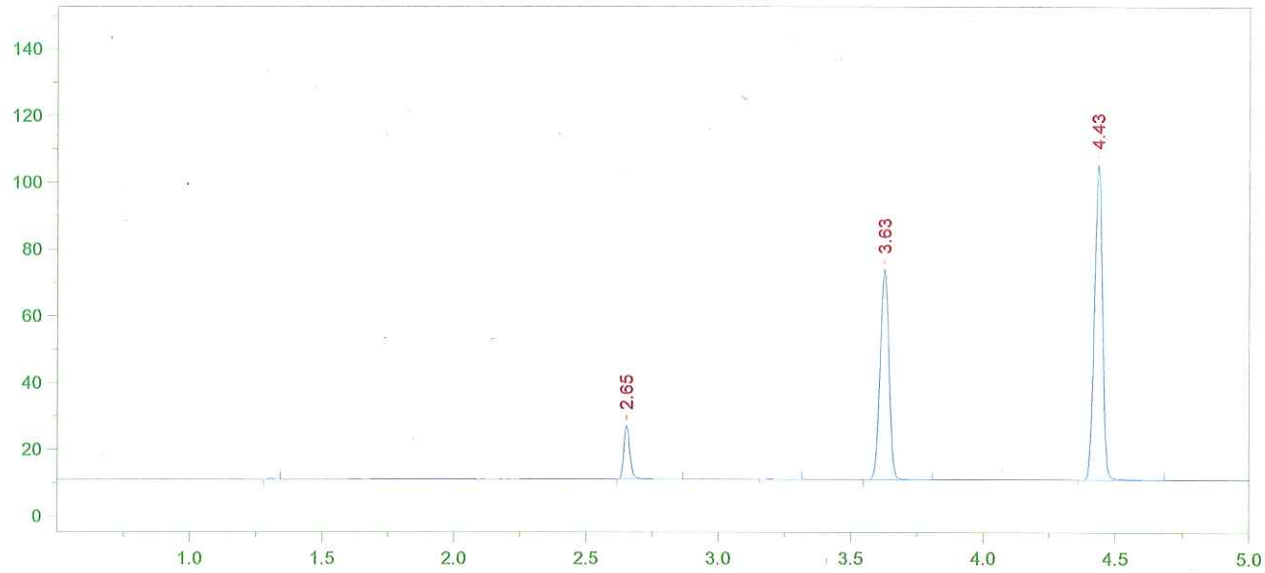


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/5/2013
Today's Time = 9:31:38 PM
Bound File Name = SIM11052013.0022.RAW
Sample Name = 0.02 ALB
Date Taken = 11/5/2013 9:31:29 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	25936	0.0243	0.0198
4	3.62	t-Butanol	157398	1.0280	0.8391
5	4.43	n-Propanol	204851	1.0000	0.8162

13-17-020 58 RLM

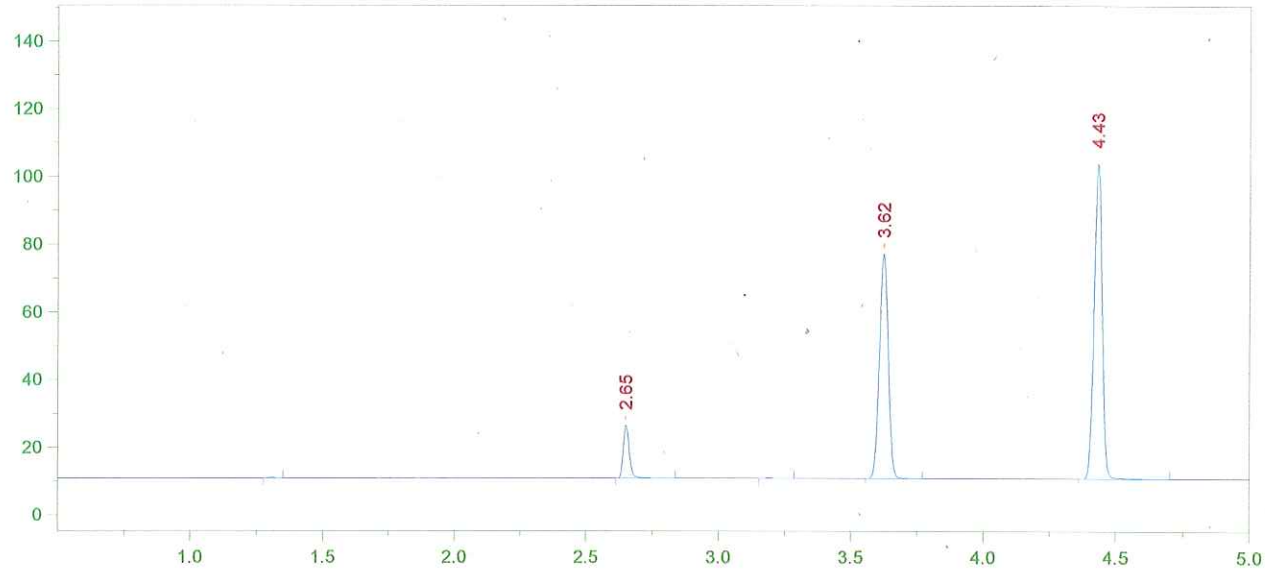


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/5/2013
Today's Time = 9:44:52 PM
Bound File Name = SIM11052013.0023.RAW
Sample Name = 0.02 ALB
Date Taken = 11/5/2013 9:44:42 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	25845	0.0247	0.0202
4	3.63	t-Butanol	146182	0.9764	0.7969
5	4.43	n-Propanol	200312	1.0000	0.8162

13-17-020 59 RZm

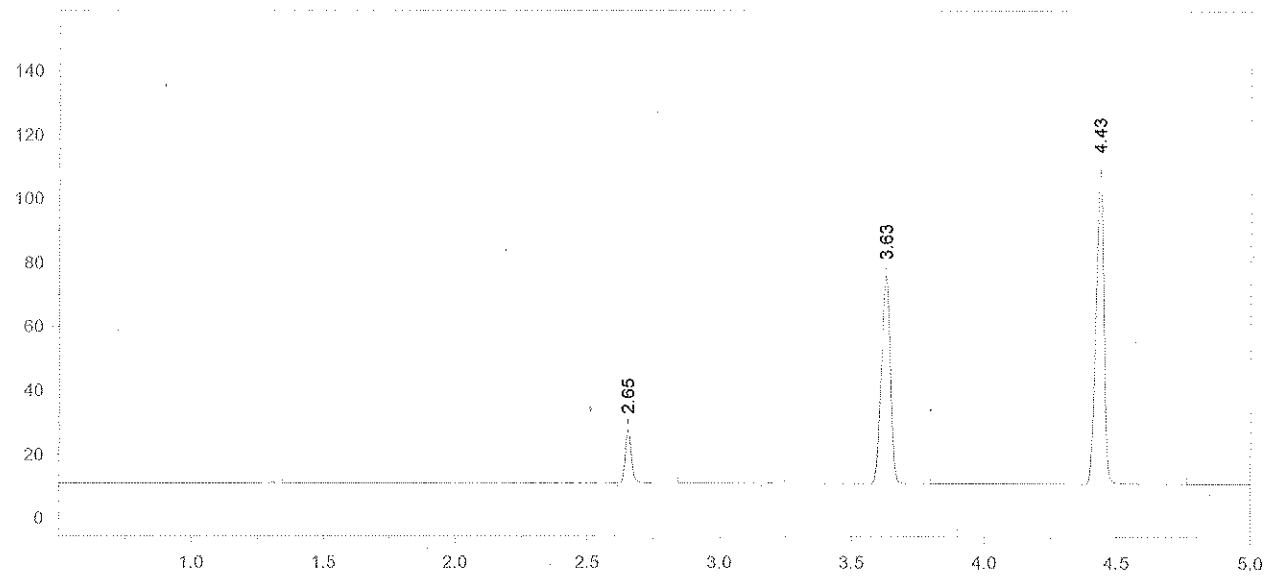


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/5/2013
Today's Time = 10:03:01 PM
Bound File Name = SIM11052013.0024.RAW
Sample Name = 0.02 ALB
Date Taken = 11/5/2013 10:02:55 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	25010	0.0241	0.0197
4	3.62	t-Butanol	153273	1.0330	0.8432
5	4.43	n-Propanol	198515	1.0000	0.8162

13-17-020 60 RZm

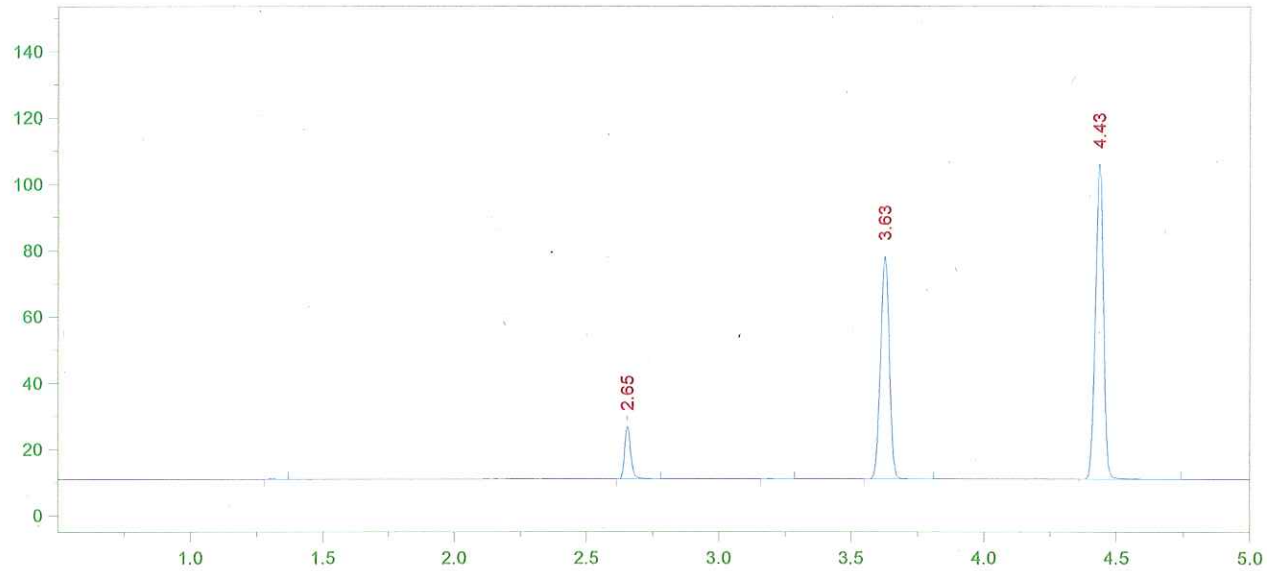


Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/5/2013
Today's Time = 10:16:47 PM
Bound File Name = SIM11052013.0025.RAW
Sample Name = 0.02 ALB
Date Taken = 11/5/2013 10:16:39 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	26925	0.0247	0.0201
4	3.63	t-Butanol	151075	0.9663	0.7887
5	4.43	n-Propanol	209175	1.0000	0.8162

13-17-020 61 RZm



Format File Name = simsoln-JFH.met.FMT

Today's Date = 11/5/2013
Today's Time = 10:34:26 PM
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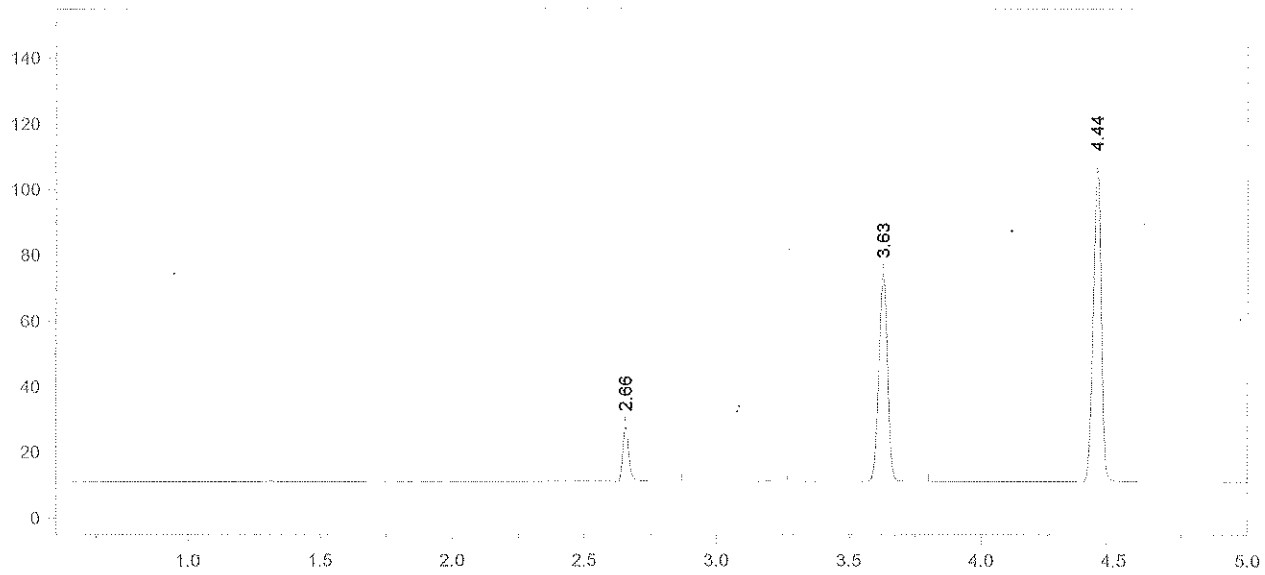
Sample Name = 0.02 ALB
Date Taken = 11/5/2013 10:34:22 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.65	Ethanol	25283	0.0239	0.0195
4	3.63	t-Butanol	155432	1.0250	0.8366
5	4.43	n-Propanol	202888	1.0000	0.8162

13-17-020 62 [illegible]



Format File Name = simsoln-JFH.met.FMT

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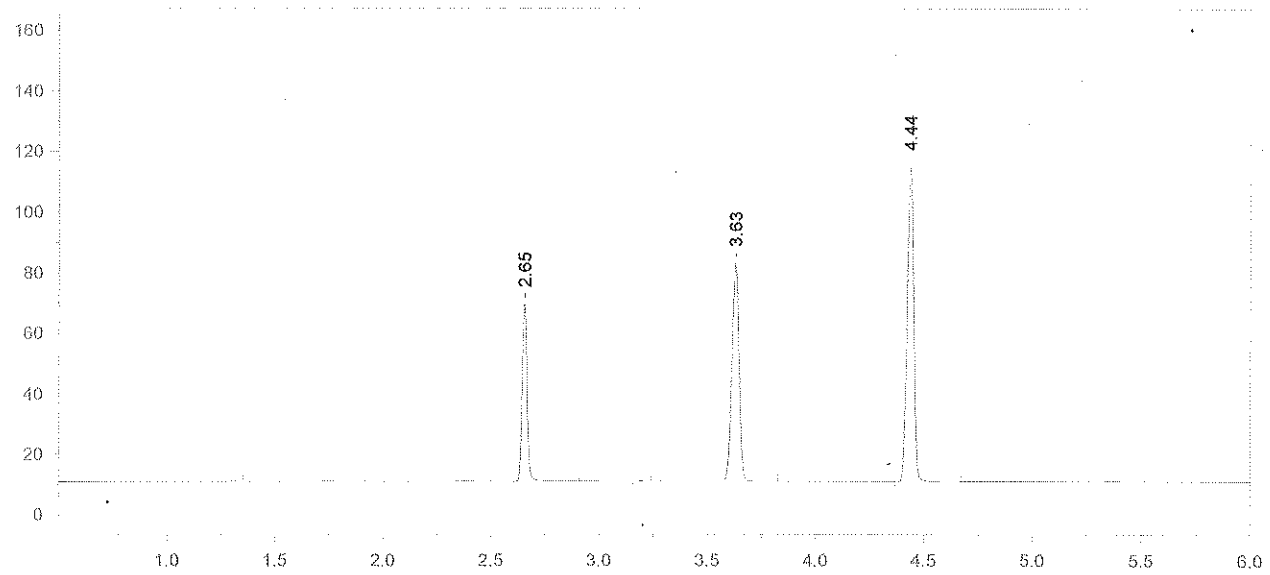
Today's Time = 10:48:10 PM
Bound File Name = SIM11052013.0027.RAW
Sample Name = 0.02 ALB
Date Taken = 11/5/2013 10:48:05 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.66	Ethanol	26596	0.0250	0.0204
4	3.63	t-Butanol	147215	0.9642	0.7869
5	4.44	n-Propanol	204287	1.0000	0.8162

13-17-020 63 RZM

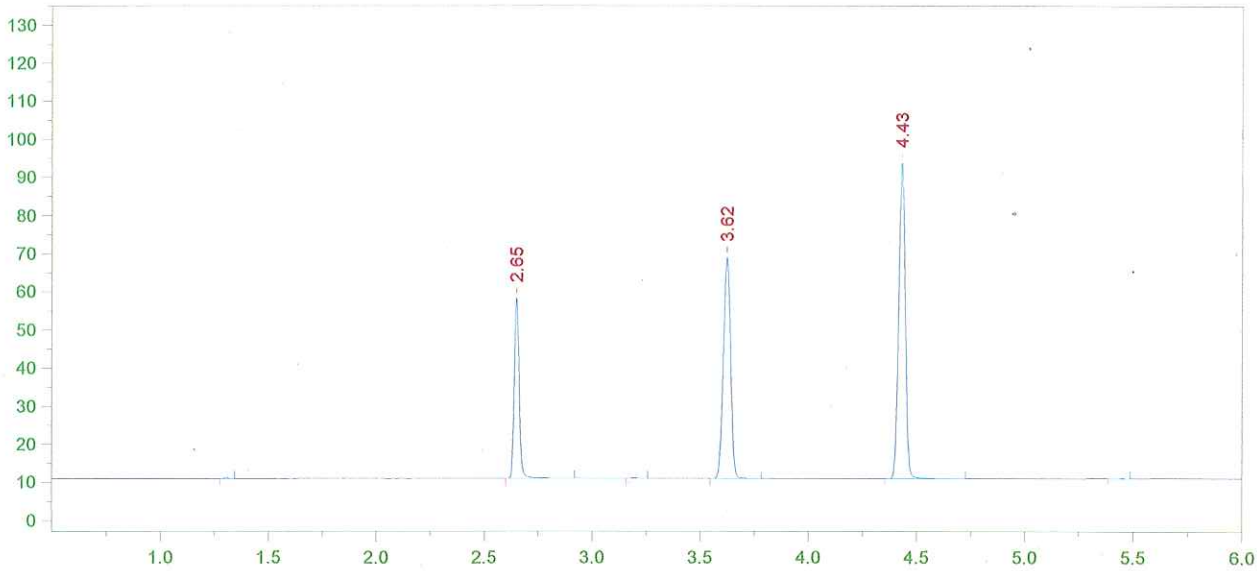


Format File Name = AlcoholVFL.FMT

Today's Date = 11/5/2013
Today's Time = 11:04:15 PM
Bound File Name = SIM11052013.0028.RAW
Sample Name = CCS
Date Taken = 11/5/2013 11:04:06 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	92278	0.0802 *
4	3.63	t-Butanol	168060	1.0195
5	4.44	n-Propanol	220547	1.0000

13-17-020 64 RLM



Format File Name = AlcoholVFL.FMT

Today's Date = 11/5/2013
Today's Time = 11:19:40 PM
Bound File Name = SIM11052013.0029.RAW
Sample Name = CCS
Date Taken = 11/5/2013 11:19:32 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL11052013.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	74339	0.0809*
4	3.62	t-Butanol	134088	1.0185
5	4.43	n-Propanol	176149	1.0000

Avg #28 + #29 = 0.080
RLM 11/6/13

13-17-020 65 RLM