VERMONT FORENSIC LABORATORY

VERIFICATION
~~BLOOD ALCOHOL~~ DATA REVIEW CHECKLIST

LOT# RLM 2/3/15
~~AGENCY CASE#~~: Cerilliant FN05211402 ANALYST: RLM
LAB #: N/A RLM 2/3/15

TECHNICAL REVIEWER: AB DATE: 2/3/15

- [x] QC complete?
- [x] Pertinent standard lot numbers listed?
- [x] Data package is complete?
- [x] Transcribed data and calculations verified?
- [x] Calibration and control results all within ± 10% (± 20% for STD A) of the known values?
- [x] Calibration line correlation factor at least 0.99xx?
- [x] Average error for components of the calibration line less than 10%?
- [x] Timing mix chromatogram demonstrates appropriate identification of components and separation from ethanol?
- [x] Surrogate compound concentrations all within 0.900 to 1.100 range?
- [x] Statistical means of the continuing calibration check sample duplicate analysis all within ± 10% of the known value?
- [x] Individual replicates within ± 5% of the statistical mean?
- [x] Reported results are means of two or more analyses?
  1. In the event of QNS for 2 (two) analysis a notation must be made on the worksheet.
  2. In the event that more than 2 (two) results are used to determine the reported result a notation is made on the worksheet.

Comments:

ADMINISTRATIVE REVIEWER: [signature] DATE: 2/4/2015

- [NA] Agency Case # and Lab # and Evidence description match submission form?
- [NA] Submitting agency, investigator, suspect, CC all match submission form?
- [NA] Chain of Custody complete and dated appropriately?
- [X] Are all pages numbered and initialed on the Examination Documents?
- [X] Case number (agency or lab number) written on all pages of the case file?
- [X] Appropriate review(s) have been completed?
- [NA] Is the exam end date documented in the paper case file consistent with the exam end date in LIMS?

Comments:

DIRECTOR REVIEWER: [signature] DATE: 2/4/2015

- [X] Does the report and associated paperwork meet administrative expectations?
- [X] Have the appropriate reviews been completed?

Check Mark or X = pass, NA= Not Applicable

File Name: C:\Methods\VFL02032015.CAL
Version: 7

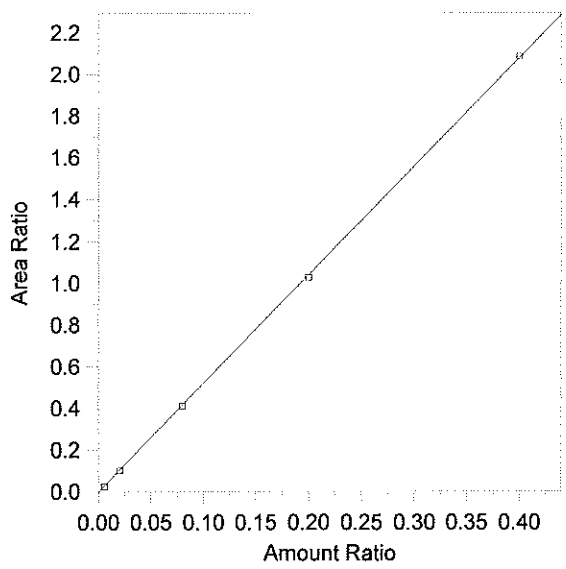
Creator:
Description:
Reason for change:

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

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

All levels are normal data points.

3 Ethanol



Expected retention time:	2.656 minutes
Search window:	0.1 minutes
Internal standard component:	7 (n-Propanol)
No retention time reference component	
Group number:	0
High alarm limit:	0
Low alarm limit:	0
Component constant:	0

Single peak quantification by area

Y = 5.194832 X + 0

Linear fit with equal weighting, forced to origin

Coefficient of determination:	0.9999335
Average error:	1.463%
Average CF:	5.161273
RSD:	1.805%

Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source	Date and time
1	(0.0836)	(85146)	--	--	0.0836	85146	Manual	8/13/2014 9:33:12 AM
2	0.005	5023.36	1004672	1.727	0.005	2.642284E-02	C:\Alcohol Data\VFL02032015\VFL02032015.0003.BND	2/3/2015 9:56:59 AM
3	0.02	19511.48	975574.1	-3.073	0.02	0.1007036	C:\Alcohol Data\VFL02032015\VFL02032015.0004.BND	2/3/2015 10:14:16 AM
4	0.08	80251.01	1003138	-1.154	0.08	0.4107897	C:\Alcohol Data\VFL02032015\VFL02032015.0005.BND	2/3/2015 10:28:10 AM
5	0.2	195658.7	978293.5	-1.045	0.2	1.028112	C:\Alcohol Data\VFL02032015\VFL02032015.0006.BND	2/3/2015 10:45:39 AM
6	0.4	401430.8	1003577	0.315	0.4	2.084473	C:\Alcohol Data\VFL02032015\VFL02032015.0007.BND	2/3/2015 10:59:33 AM

File Name = C:\Alcohol Data\VFL02032015\VFL02032015.SEQ
Version = 1
File Date = 2/3/2015 8:49:09 AM

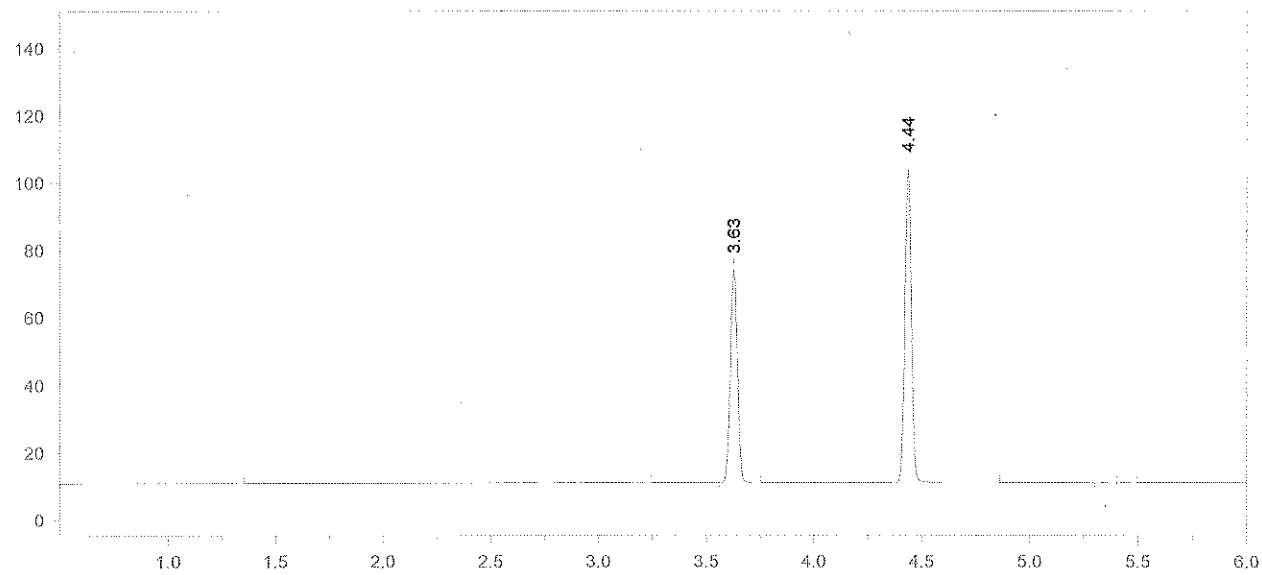
Entry #	Raw File Name	Method File Name	Sample Name	Sample Wt.	Int. Std. Amount
1	VFL02032015.0001.raw	Blood Alc temp VFL.MET	Blank	1.00	1.00
2	VFL02032015.0002.raw	Blood Alc temp VFL.MET	TMX	1.00	1.00
3	VFL02032015.0003.raw	Blood Alc temp VFL.MET	STD A	1.00	1.00
4	VFL02032015.0004.raw	Blood Alc temp VFL.MET	STD B	1.00	1.00
5	VFL02032015.0005.raw	Blood Alc temp VFL.MET	STD C	1.00	1.00
6	VFL02032015.0006.raw	Blood Alc temp VFL.MET	STD D	1.00	1.00
7	VFL02032015.0007.raw	Blood Alc temp VFL.MET	STD E	1.00	1.00
8	VFL02032015.0008.raw	Blood Alc temp VFL.MET	AQ QC	1.00	1.00
9	VFL02032015.0009.raw	Blood Alc temp VFL.MET	AQ QC	1.00	1.00
10	VFL02032015.0010.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
11	VFL02032015.0011.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
12	VFL02032015.0012.raw	Blood Alc temp VFL.MET	FN05211402	1.00	1.00
13	VFL02032015.0013.raw	Blood Alc temp VFL.MET	FN05211402	1.00	1.00
14	VFL02032015.0014.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00
15	VFL02032015.0015.raw	Blood Alc temp VFL.MET	CCS	1.00	1.00

Lot #s:

Aqueous Blank: BL- 01162015
Timing Mix: TMX- 08112014
Internal Standard: IS- 01132015
Aqueous Control: Cerilliant FN011712-02
Ethanol Standards: Cerilliant
STD A: FN011314 01
STD B: FN092710-01
STD C: FN021111-03
STD D: FN032712-01
STD E: FN012712-01

KM 2/3/15

FN05211402 2 KM

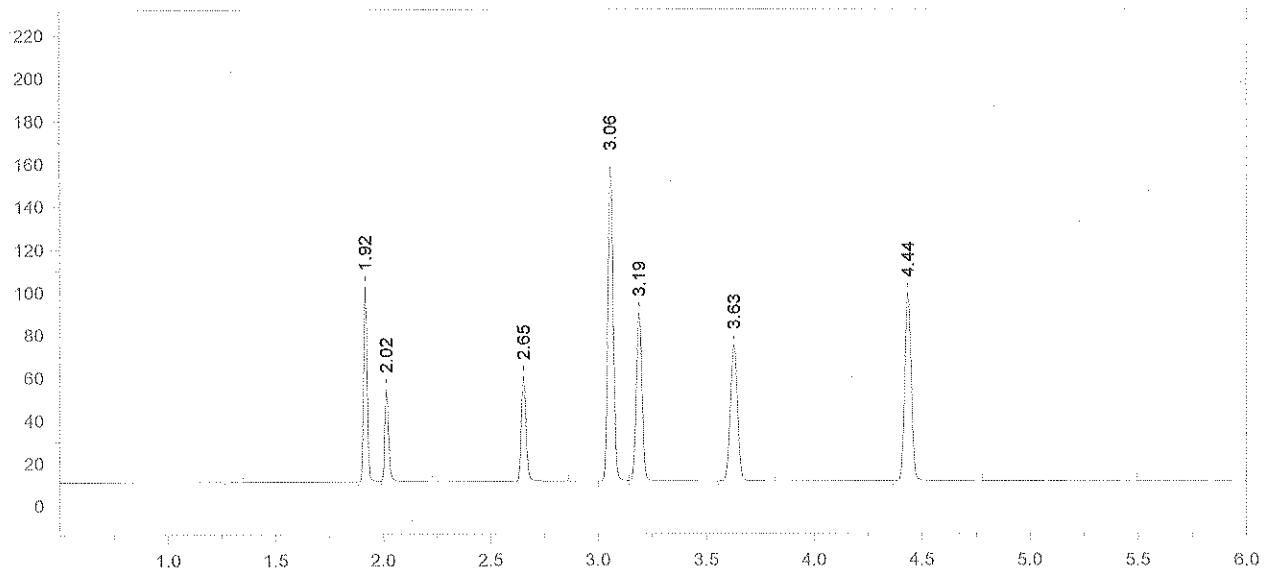


Format File Name = AlcoholVFL.FMT

Today's Date = 2/3/2015
Today's Time = 12:51:27 PM
Bound File Name = VFL02032015.0001.RAW
Sample Name = Blank
Date Taken = 2/3/2015 9:26:22 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL02032015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	3.63	t-Butanol	146620	0.9525
4	4.44	n-Propanol	199250	1.0000

FN05211402 3



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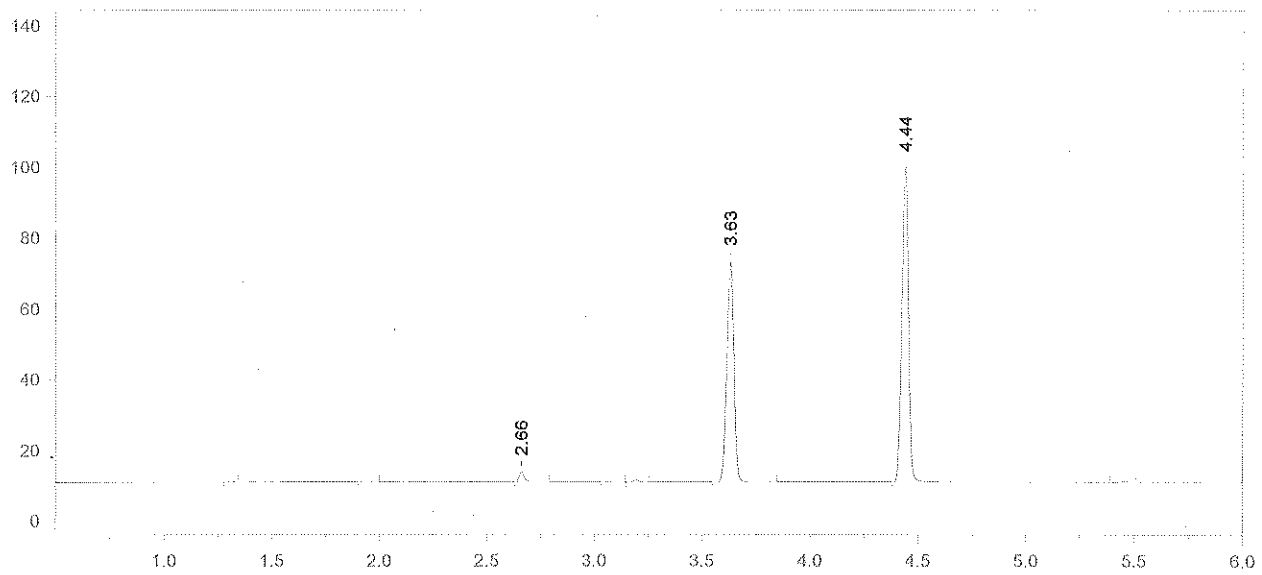
Today's Date = 2/3/2015
Today's Time = 12:51:35 PM
Bound File Name = VFL02032015.0002.RAW
Sample Name = TMX
Date Taken = 2/3/2015 9:42:43 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL02032015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	1.92	Acetaldehyde	108995	0.0695
3	2.02	Methanol	55531	0.1232
4	2.65	Ethanol	77356	0.0793
5	3.06	Acetone	254346	0.0657
6	3.19	Isopropanol	148620	0.0848
7	3.63	t-Butanol	148149	1.0212
8	4.44	n-Propanol	187791	1.0000

FN05211402 4 RM

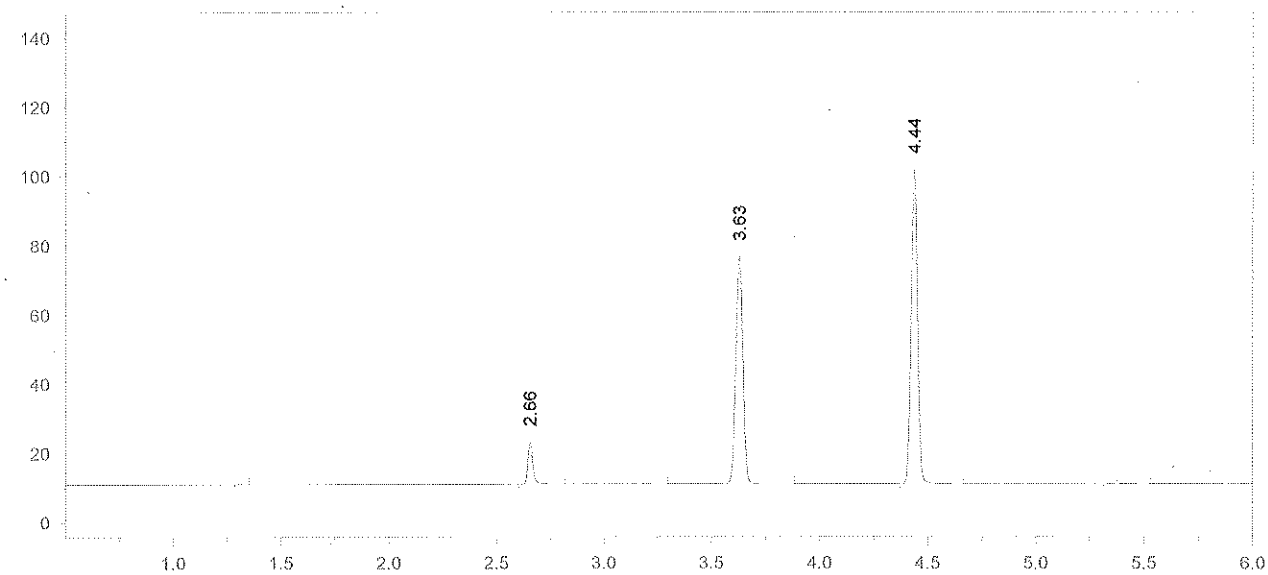


Format File Name = AlcoholVFL.FMT

Today's Date = 2/3/2015
Today's Time = 12:51:41 PM
Bound File Name = VFL02032015.0003.RAW
Sample Name = STD A
Date Taken = 2/3/2015 9:56:51 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL02032015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
3	2.66	Ethanol	05023	0.0051 *
6	3.63	t-Butanol	144212	0.9819
7	4.44	n-Propanol	190114	1.0000

FN05211402 5 Rem

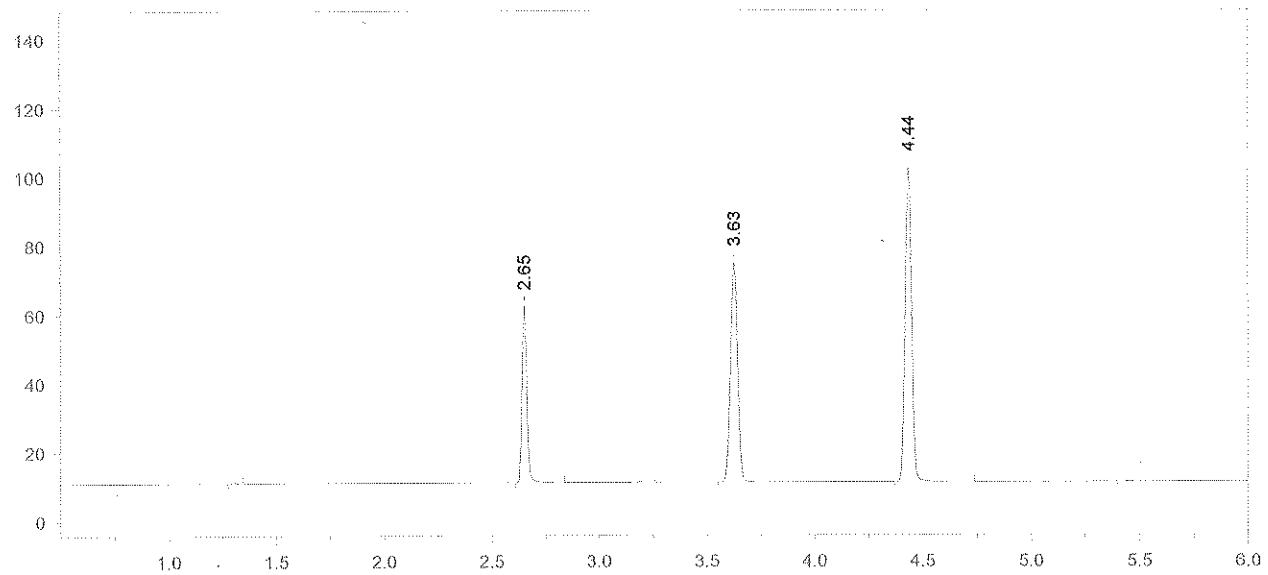


Format File Name = AlcoholVFL.FMT

Today's Date = 2/3/2015
Today's Time = 12:51:46 PM
Bound File Name = VFL02032015.0004.RAW
Sample Name = STD B
Date Taken = 2/3/2015 10:14:07 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL02032015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	19511	0.0194 *
4	3.63	t-Butanol	152266	1.0173
5	4.44	n-Propanol	193752	1.0000

FN05211402 6 KZM

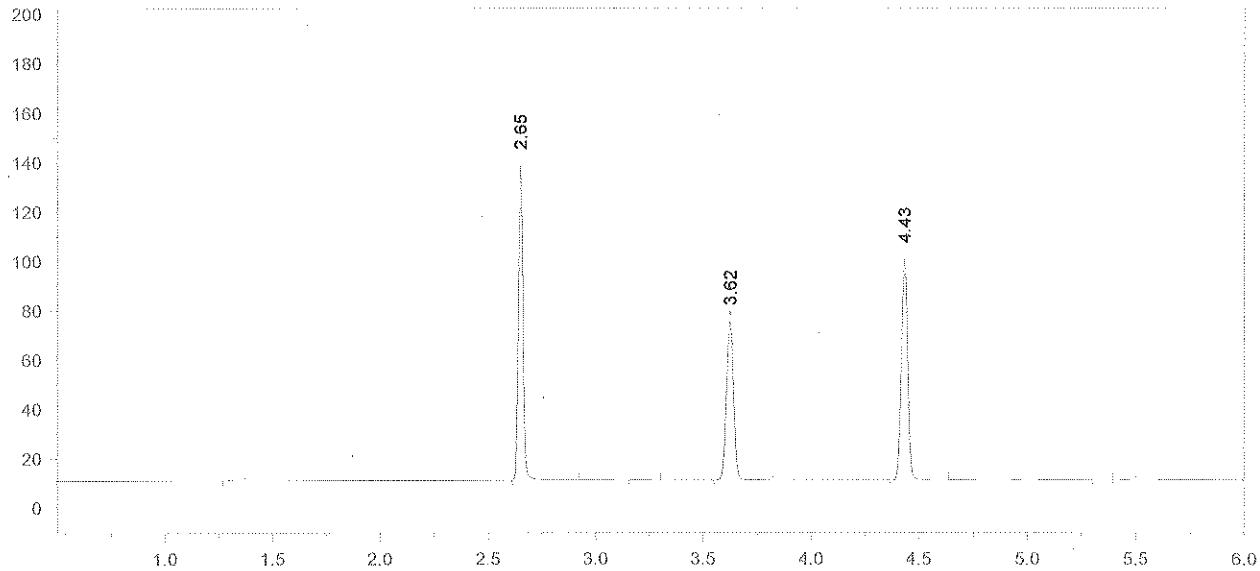


Format File Name = AlcoholVFL.FMT

Today's Date = 2/3/2015
Today's Time = 12:51:53 PM
Bound File Name = VFL02032015.0005.RAW
Sample Name = STD C
Date Taken = 2/3/2015 10:28:05 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL02032015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	80251	0.0791 *
4	3.63	t-Butanol	148063	0.9811
5	4.44	n-Propanol	195358	1.0000

FN05211402 7 RZ

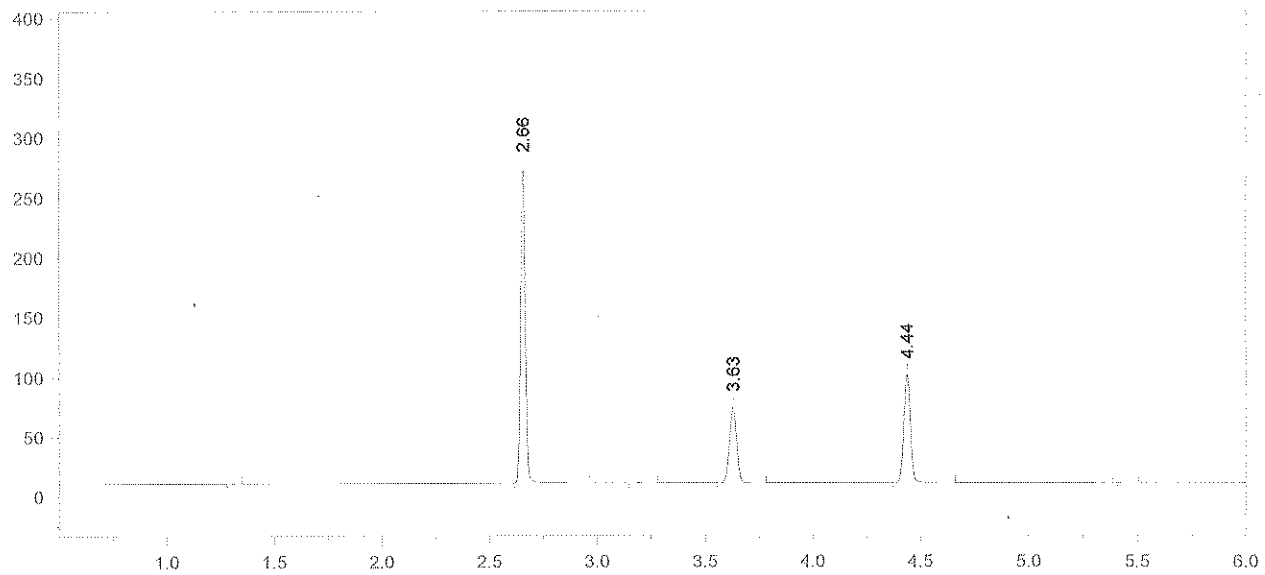


Format File Name = AlcoholVFL.FMT

Today's Date = 2/3/2015
Today's Time = 12:52:00 PM
Bound File Name = VFL02032015.0006.RAW
Sample Name = STD D
Date Taken = 2/3/2015 10:45:32 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL02032015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	195659	0.1979 *
4	3.62	t-Butanol	149948	1.0199
5	4.43	n-Propanol	190309	1.0000

FN05211402 8 Ken

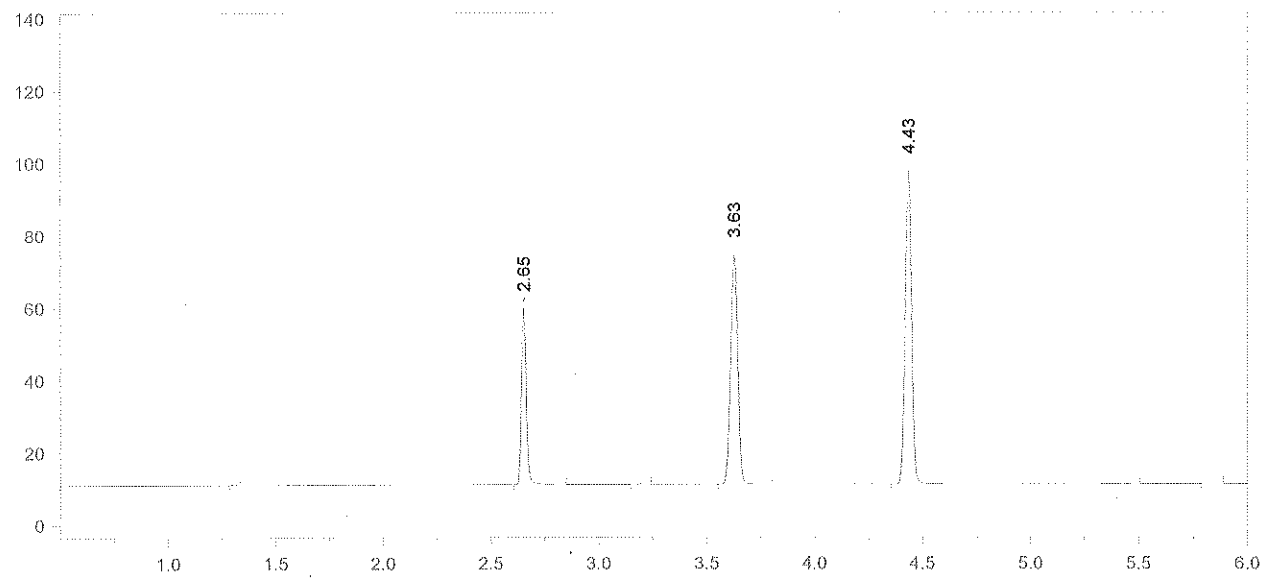


Format File Name = AlcoholVFL.FMT

Today's Date = 2/3/2015
Today's Time = 12:52:06 PM
Bound File Name = VFL02032015.0007.RAW
Sample Name = STD E
Date Taken = 2/3/2015 10:59:27 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL02032015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.66	Ethanol	401431	0.4013 *
4	3.63	t-Butanol	145594	0.9786
5	4.44	n-Propanol	192581	1.0000

FN05211402 9 KCM

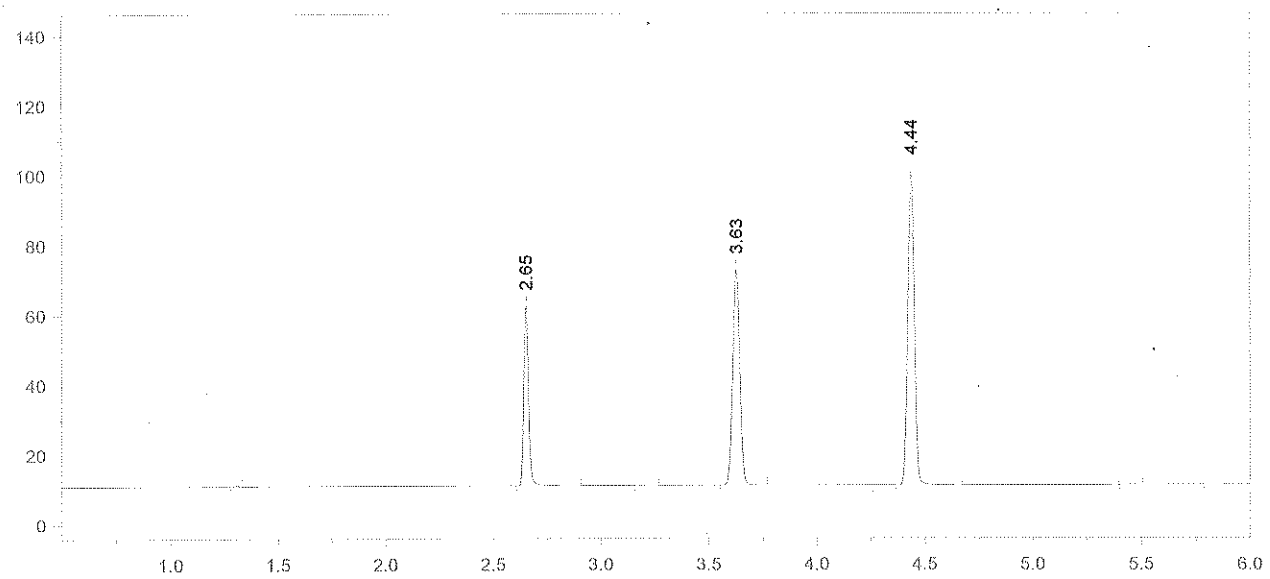


Format File Name = AlcoholVFL.FMT

Today's Date = 2/3/2015
Today's Time = 11:17:00 AM
Bound File Name = VFL02032015.0008.RAW
Sample Name = AQ QC
Date Taken = 2/3/2015 11:16:56 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL02032015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	76260	0.0789 *
4	3.63	t-Butanol	147786	1.0279
5	4.43	n-Propanol	186117	1.0000

FN05211402 10 KLM



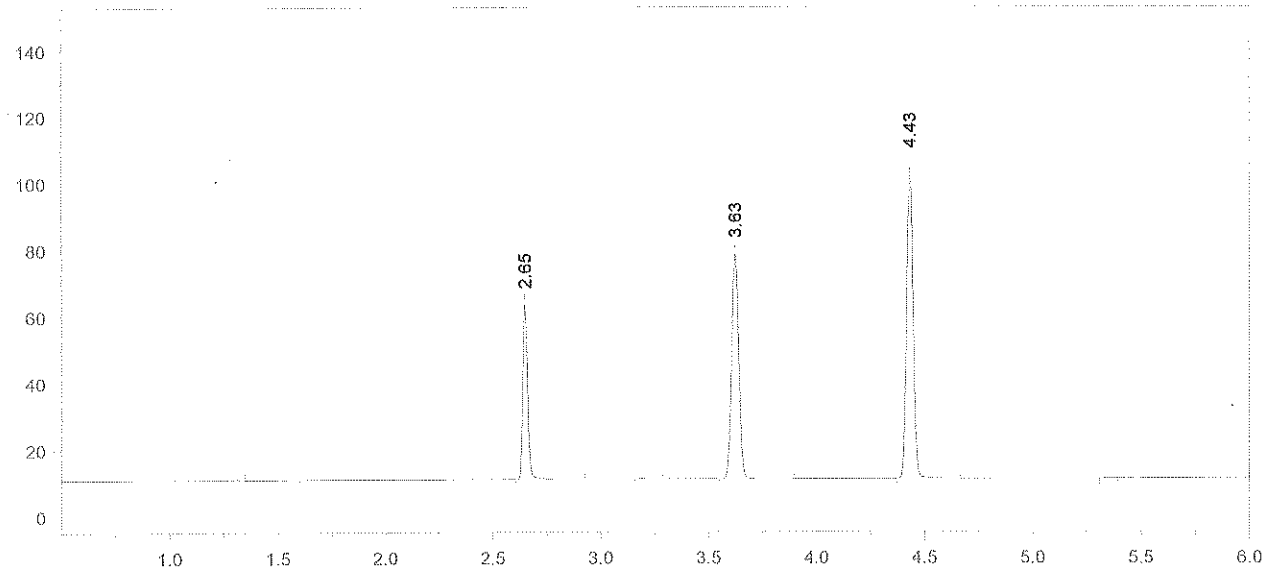
Format File Name = AlcoholVFL.FMT

Today's Date = 2/3/2015
Today's Time = 11:30:55 AM
Bound File Name = VFL02032015.0009.RAW
Sample Name = AQ QC
Date Taken = 2/3/2015 11:30:47 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL02032015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	80034	0.0803 *
4	3.63	t-Butanol	143369	0.9673
5	4.44	n-Propanol	191867	1.0000

Avg # 8 + # 9 = 0.079
Target value: 0.080
% recovery = 99%
RZM 2/3/15

FN05211402 11 RZM

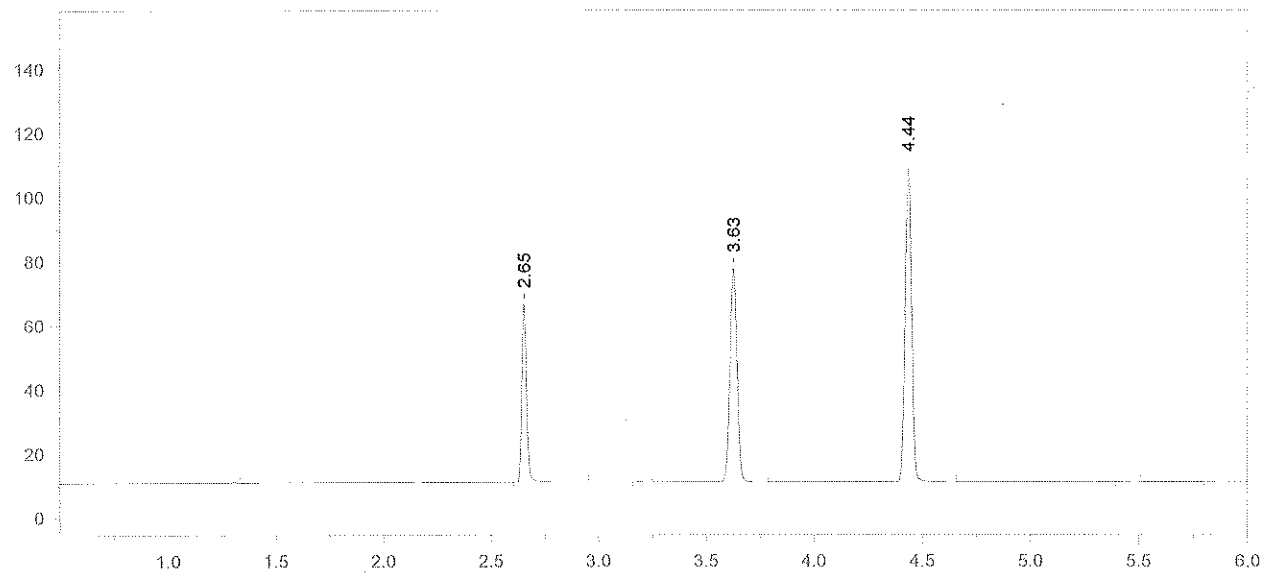


Format File Name = AlcoholVFL.FMT

Today's Date = 2/3/2015
Today's Time = 11:46:44 AM
Bound File Name = VFL02032015.0010.RAW
Sample Name = CCS
Date Taken = 2/3/2015 11:46:40 AM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL02032015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	82031	0.0784 *
4	3.63	t-Butanol	157758	1.0136
5	4.43	n-Propanol	201474	1.0000

FN05211402 12 RM



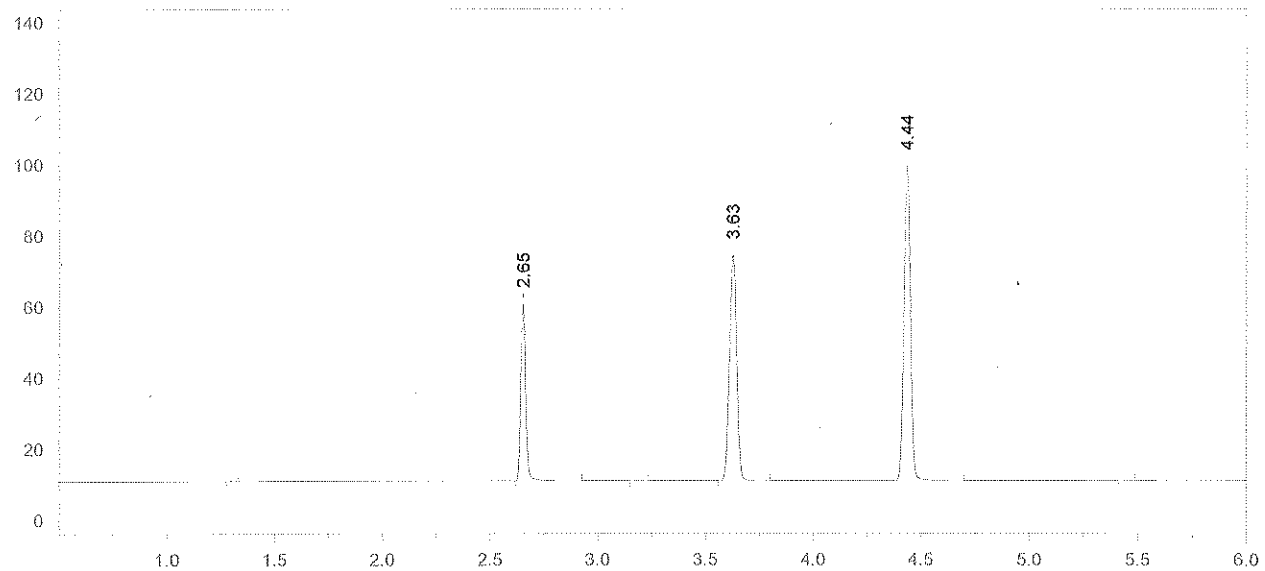
Format File Name = AlcoholVFL.FMT

Today's Date = 2/3/2015
Today's Time = 12:02:31 PM
Bound File Name = VFL02032015.0011.RAW
Sample Name = CCS
Date Taken = 2/3/2015 12:02:24 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL02032015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	86562	0.0798 *
4	3.63	t-Butanol	154940	0.9606
5	4.44	n-Propanol	208784	1.0000

Avg #10 + #11 = 0.079
RCM 2/3/15

FN05211402 13 RCM

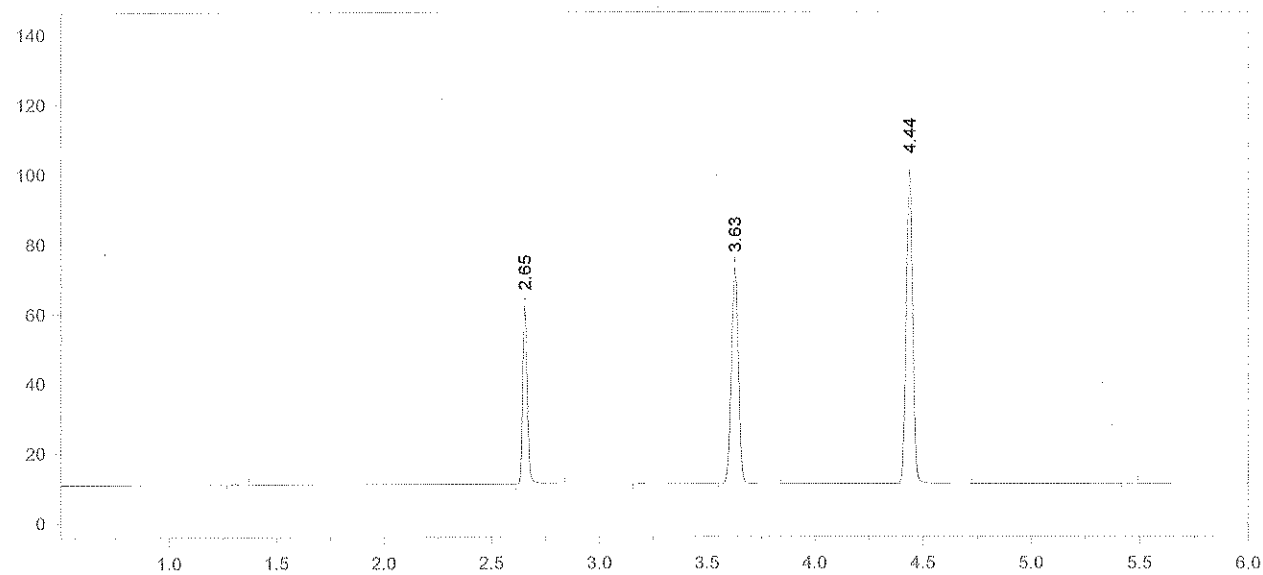


Format File Name = AlcoholVFL.FMT

Today's Date = 2/3/2015
Today's Time = 12:18:23 PM
Bound File Name = VFL02032015.0012.RAW
Sample Name = FN05211402
Date Taken = 2/3/2015 12:18:14 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL02032015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	77678	0.0794
4	3.63	t-Butanol	147430	1.0132
5	4.44	n-Propanol	188345	1.0000

FN05211402 14



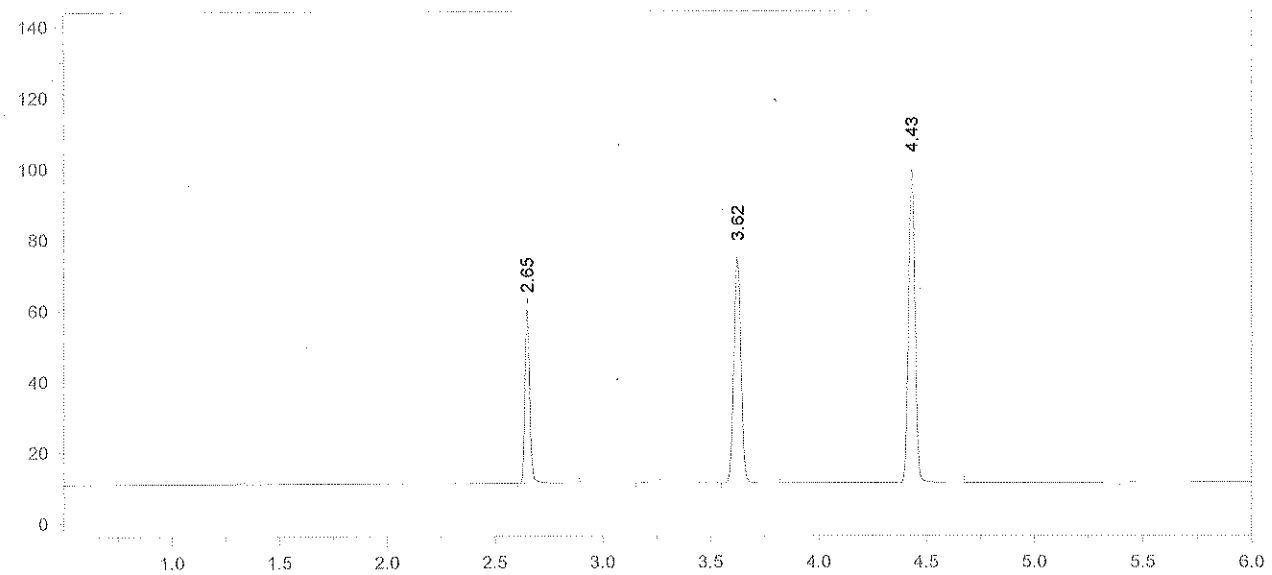
Format File Name = AlcoholVFL.FMT

Today's Date = 2/3/2015
Today's Time = 12:33:00 PM
Bound File Name = VFL02032015.0013.RAW
Sample Name = FN05211402
Date Taken = 2/3/2015 12:32:50 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL02032015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	79736	0.0803 *
4	3.63	t-Butanol	144108	0.9762
5	4.44	n-Propanol	191093	1.0000

Avg #12 + #13 = 0.080
Target value : 0.080
% recovery = 100%
Ceriliant FN05211402
RZM 2/3/15

FN05211402 15 RZM

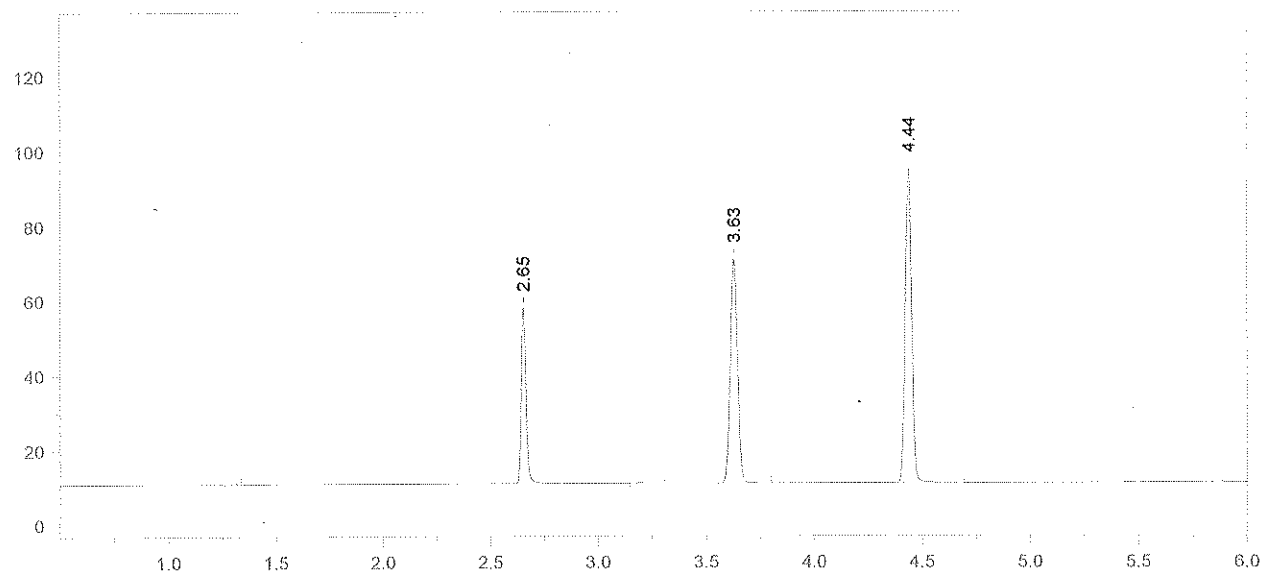


Format File Name = AlcoholVFL.FMT

Today's Date = 2/3/2015
Today's Time = 12:49:45 PM
Bound File Name = VFL02032015.0014.RAW
Sample Name = CCS
Date Taken = 2/3/2015 12:49:39 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL02032015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	77059	0.0788 *
4	3.62	t-Butanol	148320	1.0196
5	4.43	n-Propanol	188300	1.0000

FN05211402 16 RM



Format File Name = AlcoholVFL.FMT

Today's Date = 2/3/2015
Today's Time = 1:04:10 PM
Bound File Name = VFL02032015.0015.RAW
Sample Name = CCS
Date Taken = 2/3/2015 1:04:04 PM
VFL Headspace Alcohol
Method file = Blood Alc temp VFL.MET
Calibration file = VFL02032015.CAL
Calibration Version = 7

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL
2	2.65	Ethanol	73155	0.0787
4	3.63	t-Butanol	139407	1.0085
5	4.44	n-Propanol	178931	1.0000

Avg #14 + #15 = 0.079
RZM 2/3/15

FN05211402 17 RZM