Vermont Department of Health Laboratory
Organic Chemistry Program

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(ph) 802-863-7336; (fax) 802-863-7632

Certificate of Analysis of DataMaster External Standard Solution

On 10/26/2011, an ethanol solution was prepared by Steven Merrill for use as a DataMaster External Standard solution. The solution was prepared per standard laboratory practice and assigned the lot number 12-32-100 and an expiration date of 10/26/2012.

On 10/27/2011 and 10/28/2011, the solution was analyzed against calibration Cal Version #124 and Cal Version #129. 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 Burlington, Vermont on Monday, October 31, 2011.

Steven Merrill

0.1 External Standard Solution 20L
Lot # 12-32-100
Prepared 10/26/2011 by SRM
Exp 10/26/2012

JFH CAL Version 124
SRM/KLK Vials
Analyzed on 10/27/2011

0.1015 srm
0.1010
0.0988
0.1013
0.1020
0.1006
0.1016
0.1015 klk
0.1010
0.0987
0.1019
0.1013
0.0996
0.1023

Ave. = 0.1009 10-31-11
Std Dev. = 0.0011
Range = 0.0987 - 0.1023

SRM CAL Version 129
JFH/KLK Vials
Analyzed on 10/28/2011

0.1026 jfh
0.1013
0.1003
0.0995
0.0996
0.0995
0.1003
0.1006 klk
0.0975
0.0977
~~0.2020~~
0.1010
0.0996
0.1024

Ave. = 0.1001 10-31-11
Std Dev. = 0.0015
Range = 0.0975 - 0.1026

Reviewed 10-31-11

10/31/11

Total Values from Both Runs

Average	Mean
0.0975	0.0975
0.0977	0.0977
0.0987	0.0987
0.0988	0.0988
0.0995	0.0995
0.0995	
0.0996	0.0996
0.0996	
0.0996	
0.1003	0.1003
0.1003	
0.1006	0.1006
0.1006	
0.1010	0.1010
0.1010	
0.1010	
0.1013	0.1013
0.1013	
0.1013	
0.1015	0.1015
0.1015	
0.1016	0.1016
0.1019	0.1019
0.1020	0.1020
0.1023	0.1023
0.1024	0.1024
0.1026	0.1026

Ave. =	0.1006
Std Dev. =	0.0014
Range =	0.0975 - 0.1026
Mean =	0.1005
Mean Std Dev. =	0.0016
RPD (Mean to Ave.)=	0.10%

DataMaster Simulator Solution
Lot # 12-32-100 $EtOH_{aq}$ Conc: 0.100
Range: 0.095 - 0.105
Preparation Date: 10/26/2011 Expires: 10/26/2012

OPENED:

DataMaster Simulator Solution
Lot # 12-32-100 $EtOH_{aq}$ Conc: 0.100
Range: 0.095 - 0.105
Preparation Date: 10/26/2011 Expires: 10/26/2012

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Preparation Date: 10/26/2011 Expires: 10/26/2012

OPENED:

DataMaster Simulator Solution
Lot # 12-32-100 $EtOH_{aq}$ Conc: 0.100
Range: 0.095 - 0.105
Preparation Date: 10/26/2011 Expires: 10/26/2012

OPENED:

File Name: C:\Methods\SimSolution.cal
Version: 124

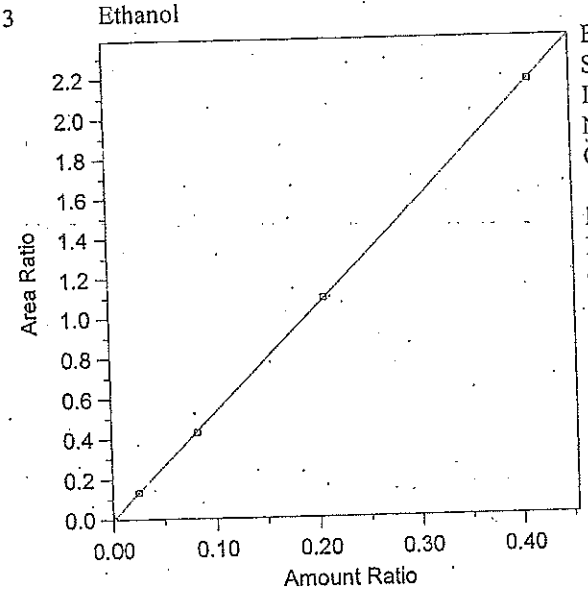
Creator:
Description:
Reason for change:

Internal standard calibration
No injection volume correction
No sample weight correction
Area reject threshold: 15000
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: 2.539 minutes
Search window: 0.1 minutes
Internal standard component: 7 (n-Propanol)
No retention time reference component
Group number: 0

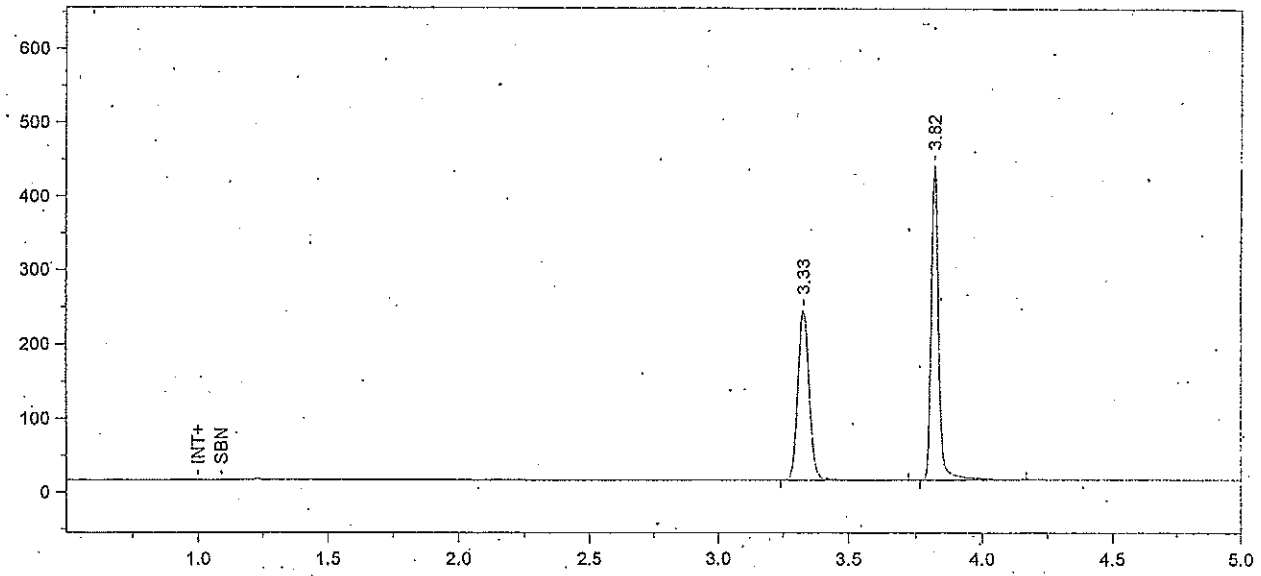
High alarm limit: 0
Low alarm limit: 0
Component constant: 0

Single peak quantification by area

Y = 5.258974 X + 0

Linear fit with equal weighting, forced to origin
Coefficient of determination: 0.9999799
Average error: 0.775%
Average CF: 4.17406
RSD: 55.916%

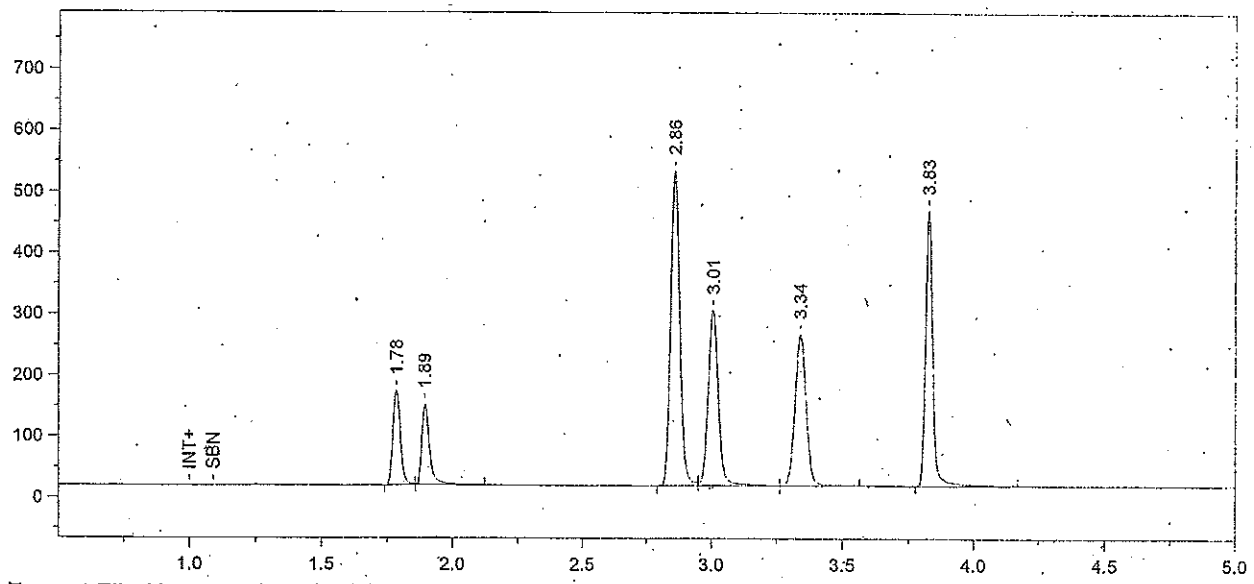
Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source	Date and time
1	0	(0)	–	0.000	0	0	Manual	4/11/2005 10:03:40 AM
2	0.0257	117116.7	4557071	-2.030	0.0257	0.1324118	C:\Alcohol Data\Sim102411\Sim102411.0003.BND	10/24/2011 10:09:49 AM
3	0.0828	376100.5	4542277	-1.457	0.0828	0.4290984	C:\Alcohol Data\Sim102411\Sim102411.0004.BND	10/24/2011 10:24:50 AM
4	0.2072	962295.9	4644285	0.363	0.2072	1.09362	C:\Alcohol Data\Sim102411\Sim102411.0005.BND	10/24/2011 10:39:47 AM
5	0.4126	1871253	4535272	-0.025	0.4126	2.169308	C:\Alcohol Data\Sim102411\Sim102411.0006.BND	10/24/2011 10:52:30 AM



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/24/2011
Today's Time = 10:54:13 AM
Bound File Name = Sim102411.0001.RAW
Sample Name = Blank
Date Taken = 10/24/2011 9:39:33 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 124

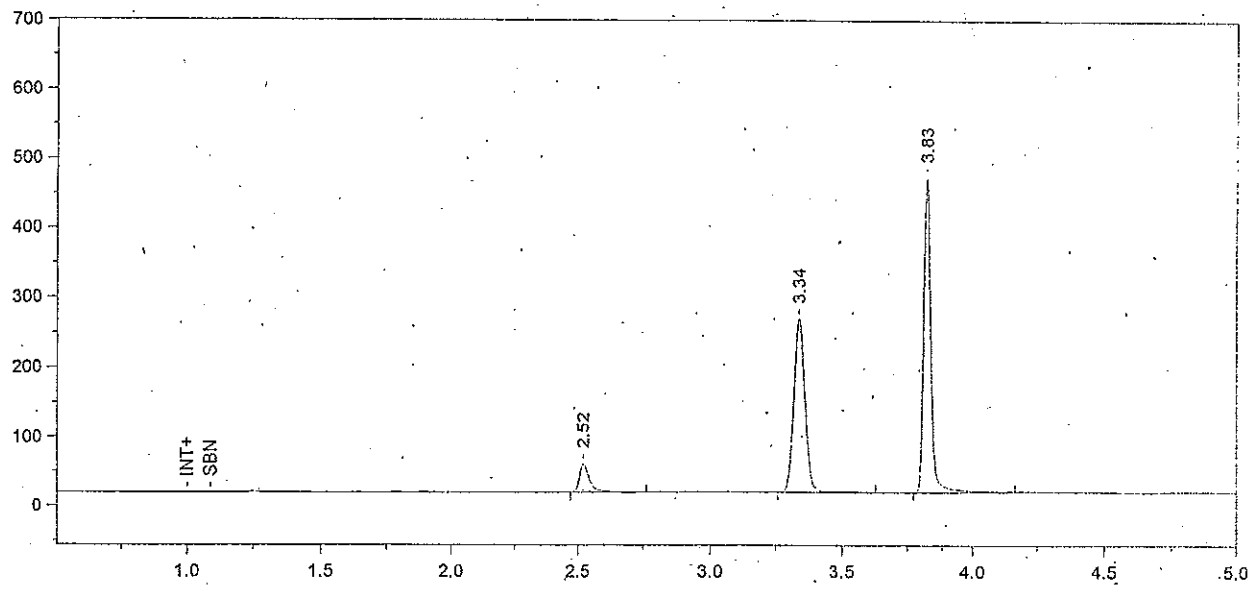
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	3.33	t-Butanol	695704	0.9933	0.8107
2	3.82	n-Propanol	830493	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/24/2011
Today's Time = 10:54:17 AM
Bound File Name = Sim102411.0002.RAW
Sample Name = TMX
Date Taken = 10/24/2011 9:54:40 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 124

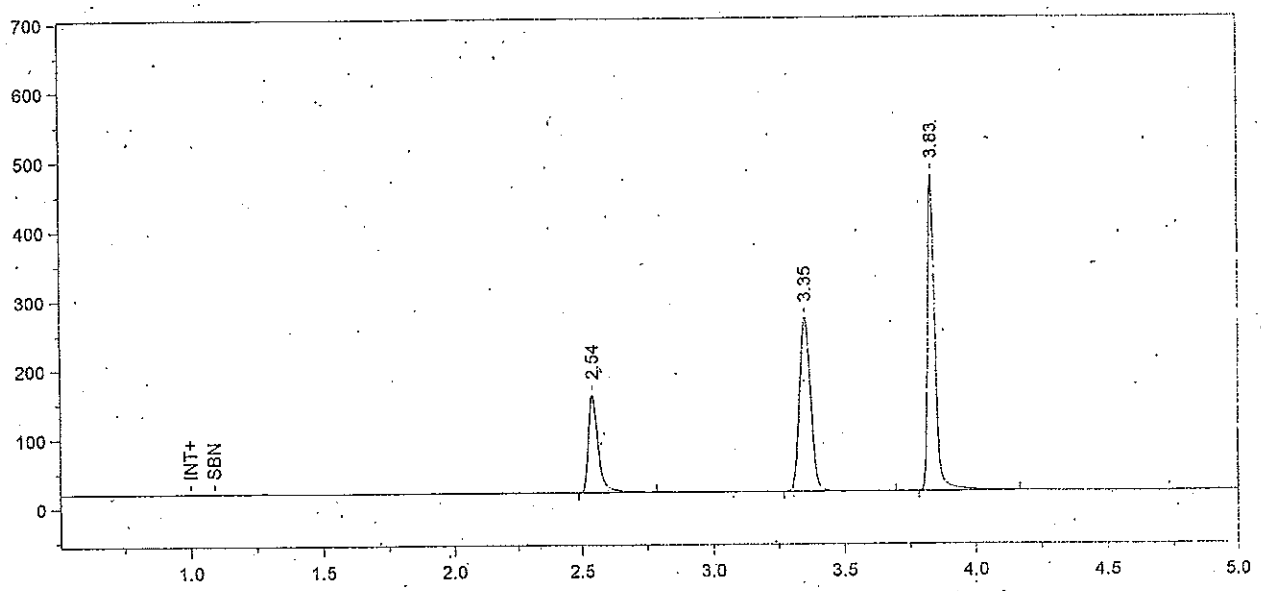
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	1.78	Acetaldehyde	302495	0.0510	0.0416
2	1.89	Methanol	273131	0.1280	0.1045
3	2.86	Acetone	1287988	0.0600	0.0490
4	3.01	Isopropanol	792201	0.0810	0.0661
5	3.34	t-Butanol	739207	1.0013	0.8173
6	3.83	n-Propanol	875347	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/24/2011 Today's Time = 10:54:20 AM
Bound File Name = Sim102411.0003.RAW
Sample Name = Std A
Date Taken = 10/24/2011 10:09:41 AM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 124

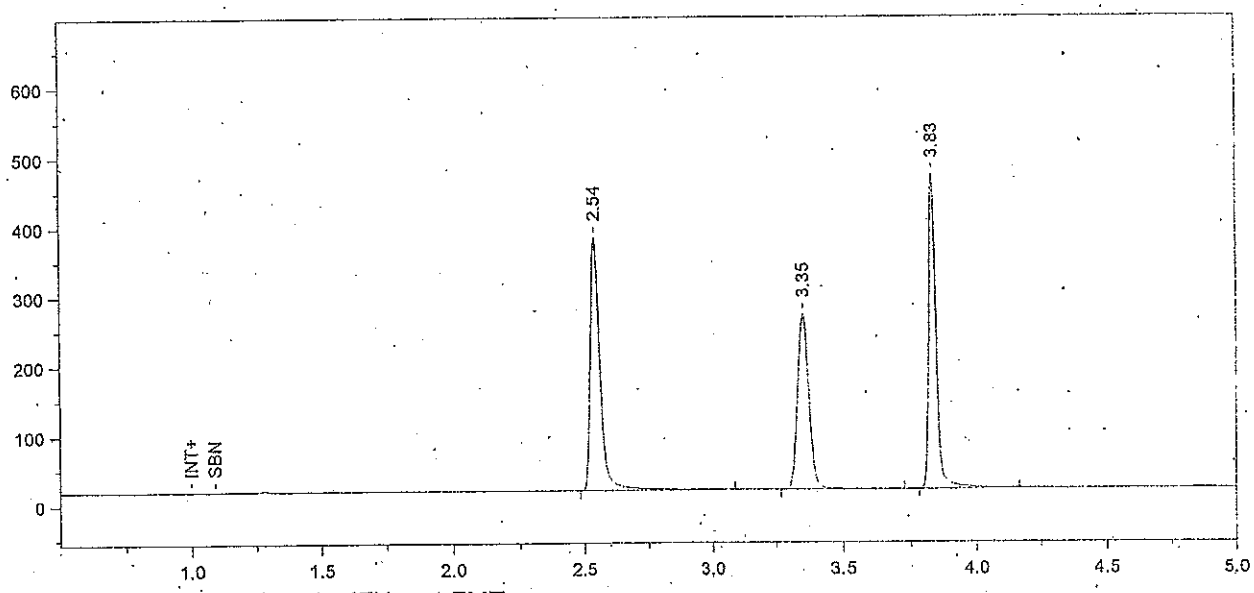
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.52	Ethanol	117117	0.0252	0.0206
2	3.34	t-Butanol	744628	0.9982	0.8147
3	3.83	n-Propanol	884489	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/24/2011
Today's Time = 10:54:24 AM
Bound File Name = Sim102411.0004.RAW
Sample Name = Std B
Date Taken = 10/24/2011 10:24:43 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 124

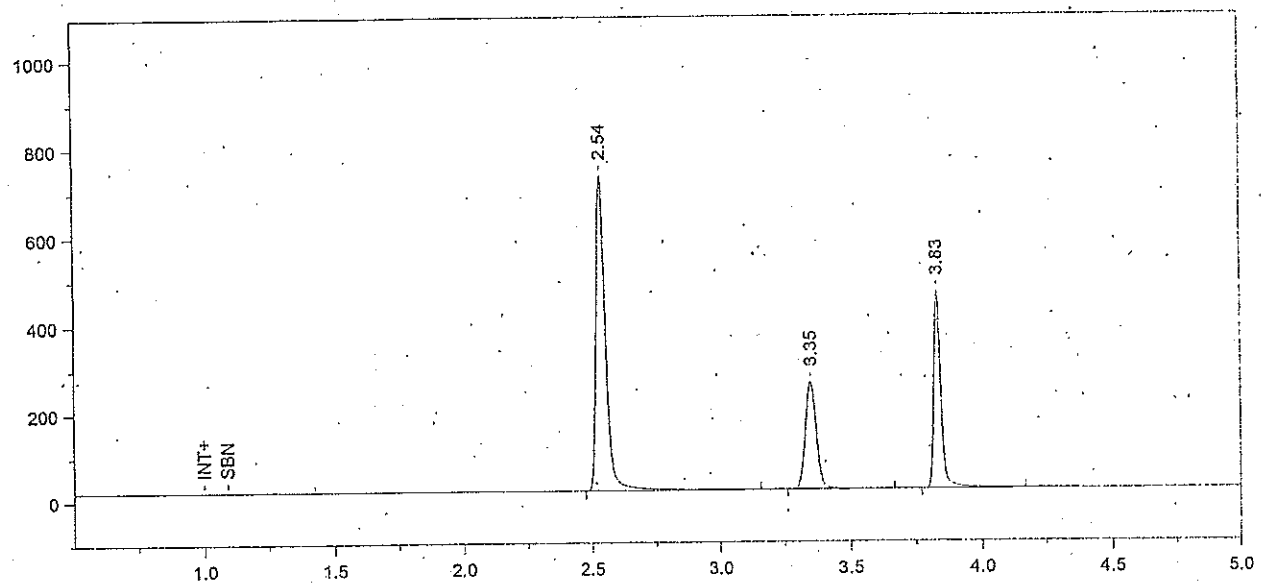
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.54	Ethanol	376101	0.0816	0.0666
2	3.35	t-Butanol	741784	1.0035	0.8190
3	3.83	n-Propanol	876490	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/24/2011
Today's Time = 10:54:27 AM
Bound File Name = Sim102411.0005.RAW
Sample Name = Std C
Date Taken = 10/24/2011 10:39:44 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 124

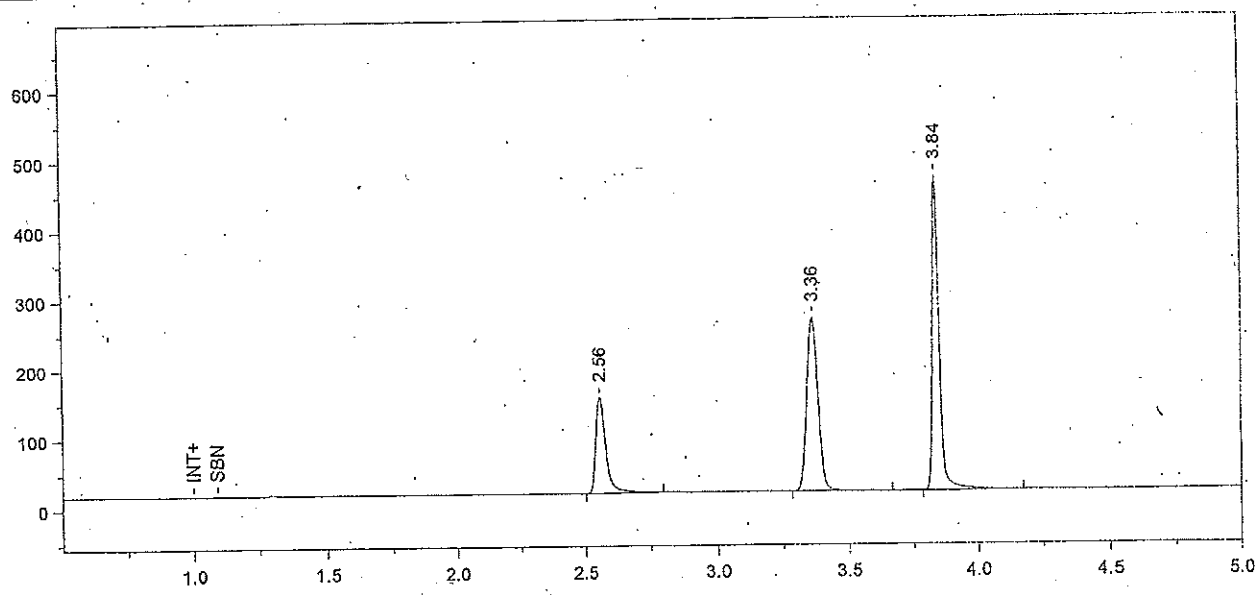
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.54	Ethanol	962296	0.2080	0.1697
2	3.35	t-Butanol	741746	0.9995	0.8158
3	3.83	n-Propanol	879918	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/24/2011
Today's Time = 10:54:31 AM
Bound File Name = Sim102411.0006.RAW
Sample Name = Std D
Date Taken = 10/24/2011 10:52:26 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 124

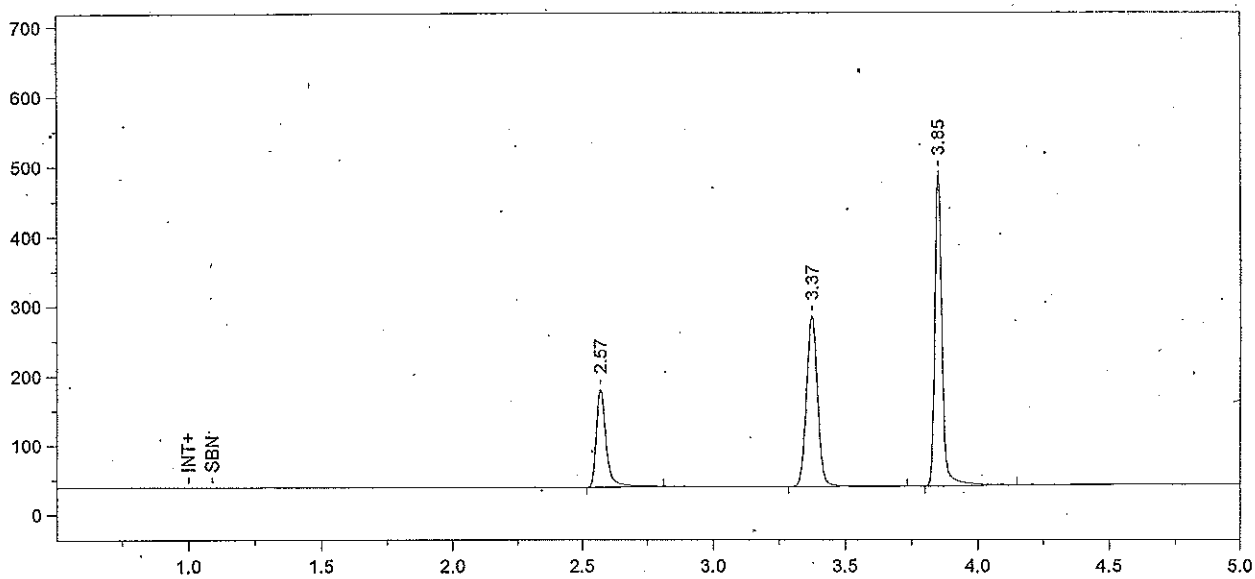
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.54	Ethanol	1871253	0.4125	0.3367
2	3.35	t-Butanol	725675	0.9975	0.8142
3	3.83	n-Propanol	862604	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/24/2011
Today's Time = 11:04:44 AM
Bound File Name = Sim102411.0007.RAW
Sample Name = AQ QC
Date Taken = 10/24/2011 11:04:38 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 124

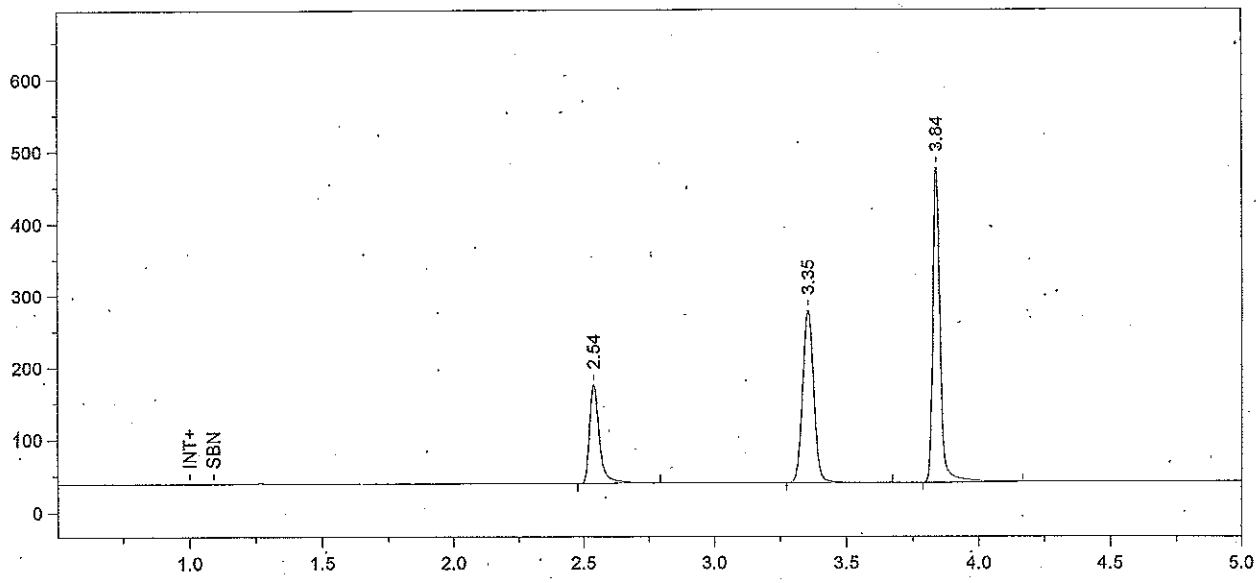
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.56	Ethanol	364567	0.0800	0.0653
2	3.36	t-Butanol	730066	0.9986	0.8150
3	3.84	n-Propanol	866872	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/27/2011 Today's Time = 5:36:12 PM
Bound File Name = Sim102711.0001.RAW
Sample Name = CCS B
Date Taken = 10/27/2011 5:36:08 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 124

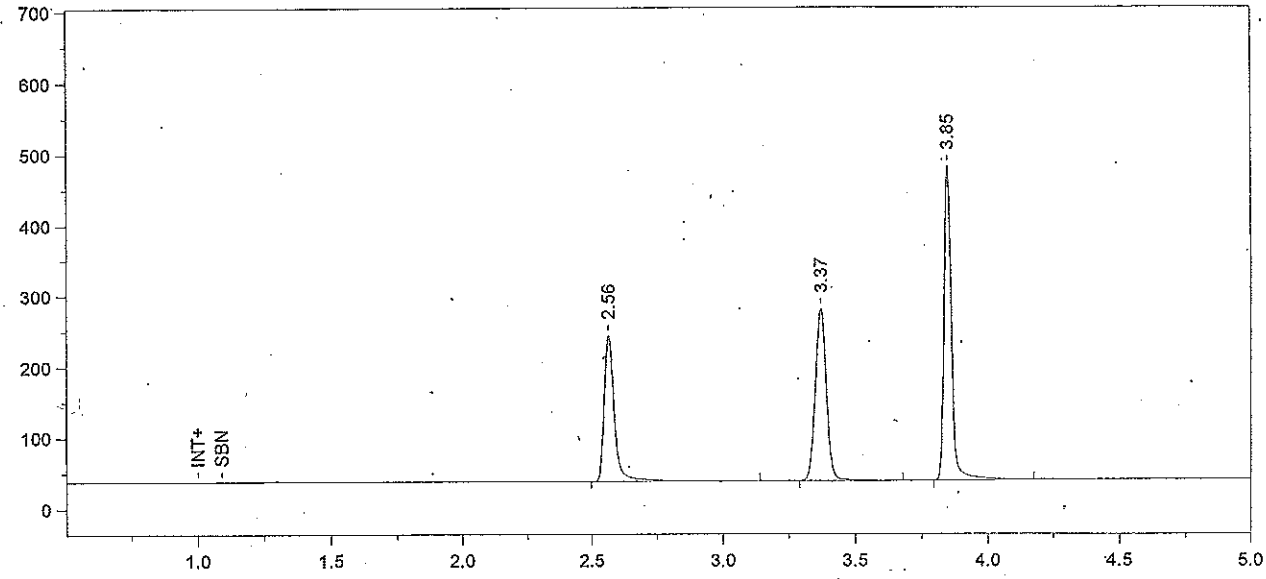
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.57	Ethanol	369433	0.0815	0.0666
2	3.37	t-Butanol	722293	0.9941	0.8114
3	3.85	n-Propanol	861499	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/27/2011 Today's Time = 5:51:05 PM
Bound File Name = Sim102711.0002.RAW
Sample Name = CCS B
Date Taken = 10/27/2011 5:51:03 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 124

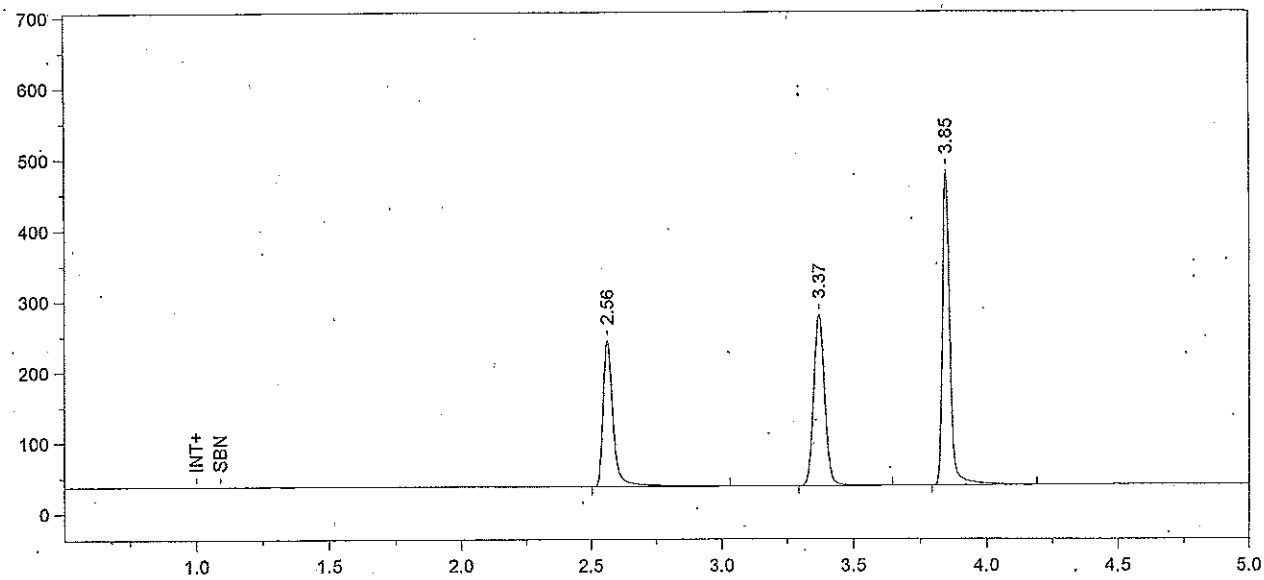
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.54	Ethanol	364250	0.0814	0.0664
2	3.35	t-Butanol	712567	0.9924	0.8100
3	3.84	n-Propanol	851407	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/27/2011 Today's Time = 6:06:09 PM
Bound File Name = Sim102711.0003.RAW
Sample Name = 0.1 Sim Sol - SRM
Date Taken = 10/27/2011 6:06:04 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 124

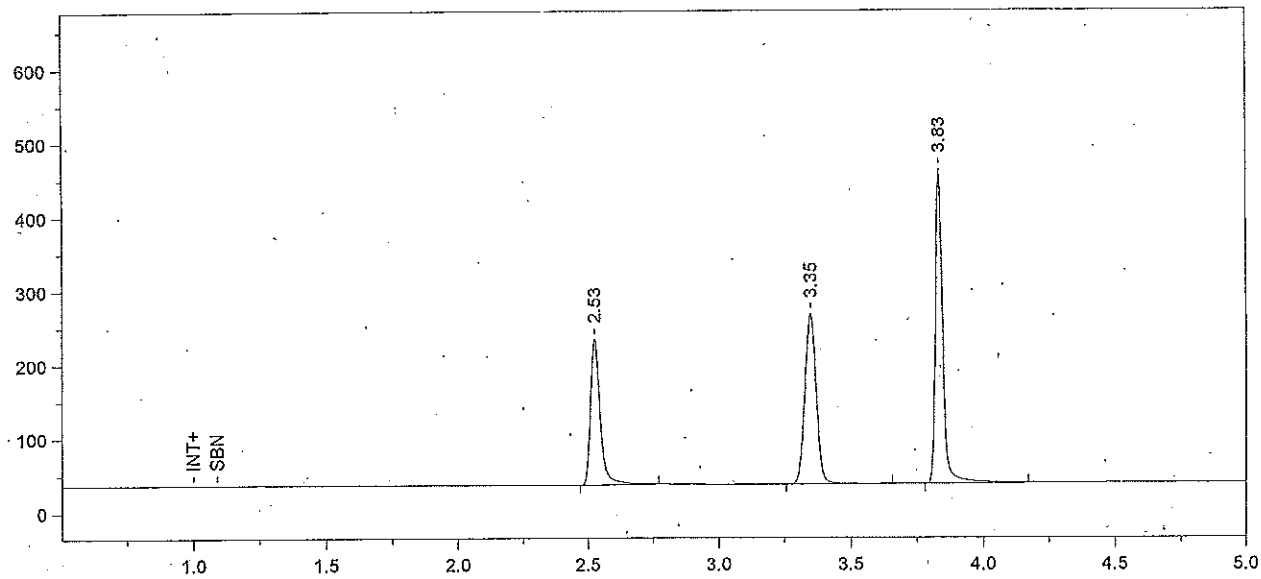
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.56	Ethanol	555377	0.1243	0.1015
2	3.37	t-Butanol	711444	0.9931	0.8106
3	3.85	n-Propanol	849389	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/27/2011
Today's Time = 6:21:08 PM
Bound File Name = Sim102711.0004.RAW
Sample Name = 0.1 Sim Sol - SRM
Date Taken = 10/27/2011 6:21:05 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 124

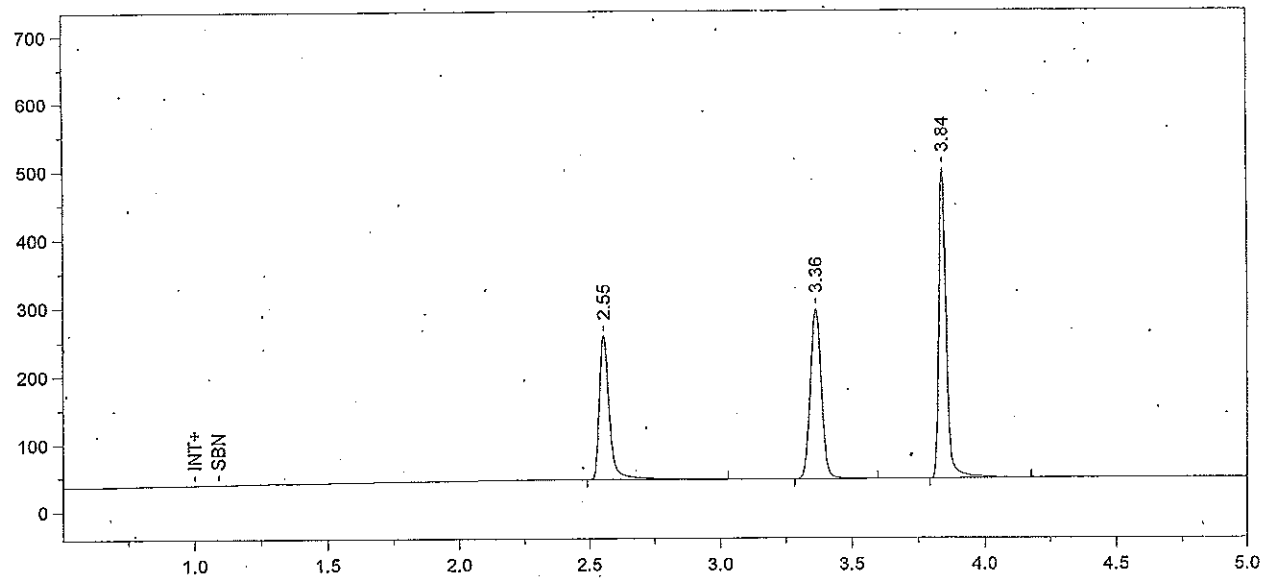
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.56	Ethanol	552250	0.1238	0.1010
2	3.37	t-Butanol	708492	0.9904	0.8084
3	3.85	n-Propanol	848219	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/27/2011
Today's Time = 6:36:11 PM
Bound File Name = Sim102711.0005.RAW
Sample Name = 0.1 Sim Sol - SRM
Date Taken = 10/27/2011 6:36:06 PM
VDH Headspace.Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 124

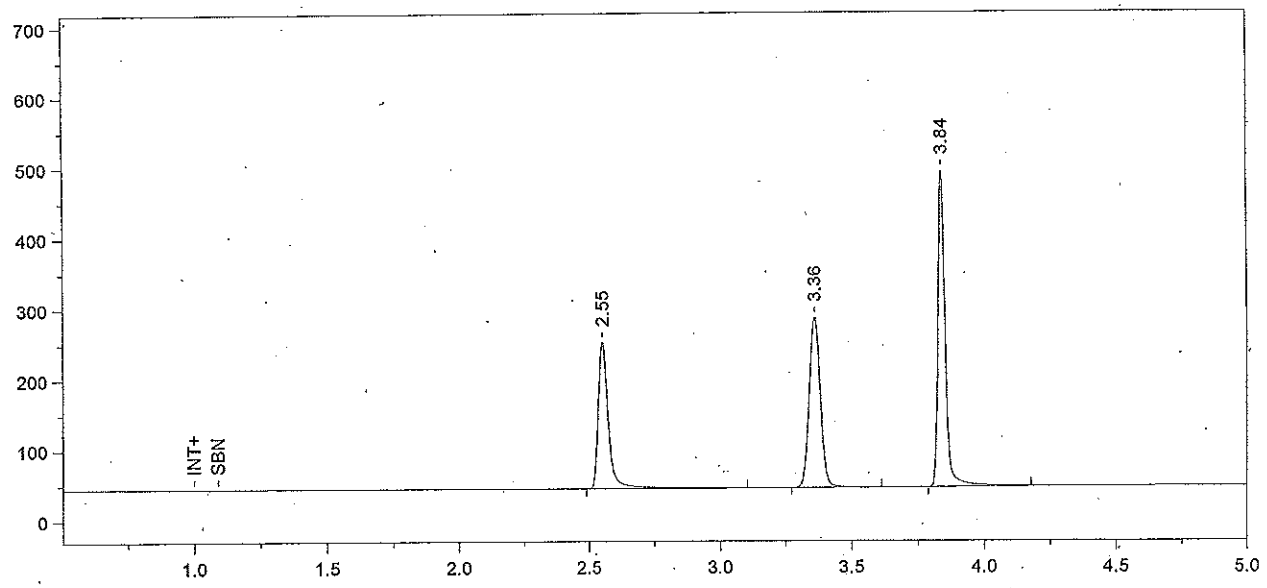
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.53	Ethanol	525338	0.1211	0.0988
2	3.35	t-Butanol	689137	0.9905	0.8084
3	3.83	n-Propanol	824949	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/27/2011
Today's Time = 6:51:10 PM
Bound File Name = Sim102711.0006.RAW
Sample Name = 0.1 Sim Sol - SRM
Date Taken = 10/27/2011 6:51:05 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 124

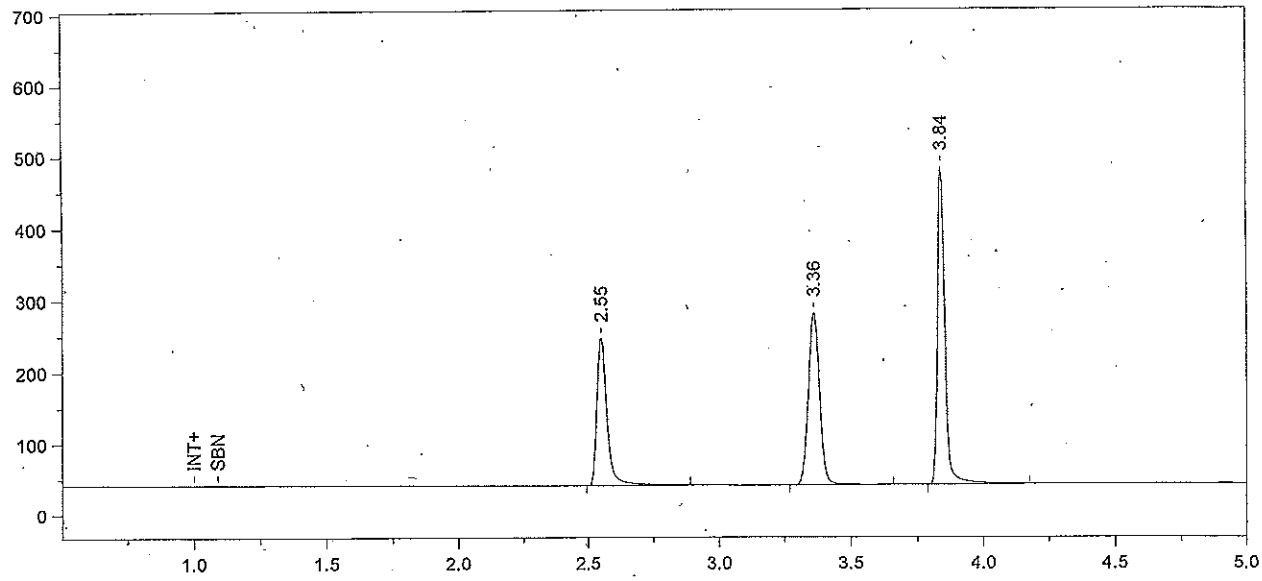
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	570758	0.1242	0.1013
2	3.36	t-Butanol	736557	0.9990	0.8154
3	3.84	n-Propanol	874174	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/27/2011
Today's Time = 7:06:15 PM
Bound File Name = Sim102711.0007.RAW
Sample Name = 0.1 Sim Sol - SRM
Date Taken = 10/27/2011 7:06:12 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 124

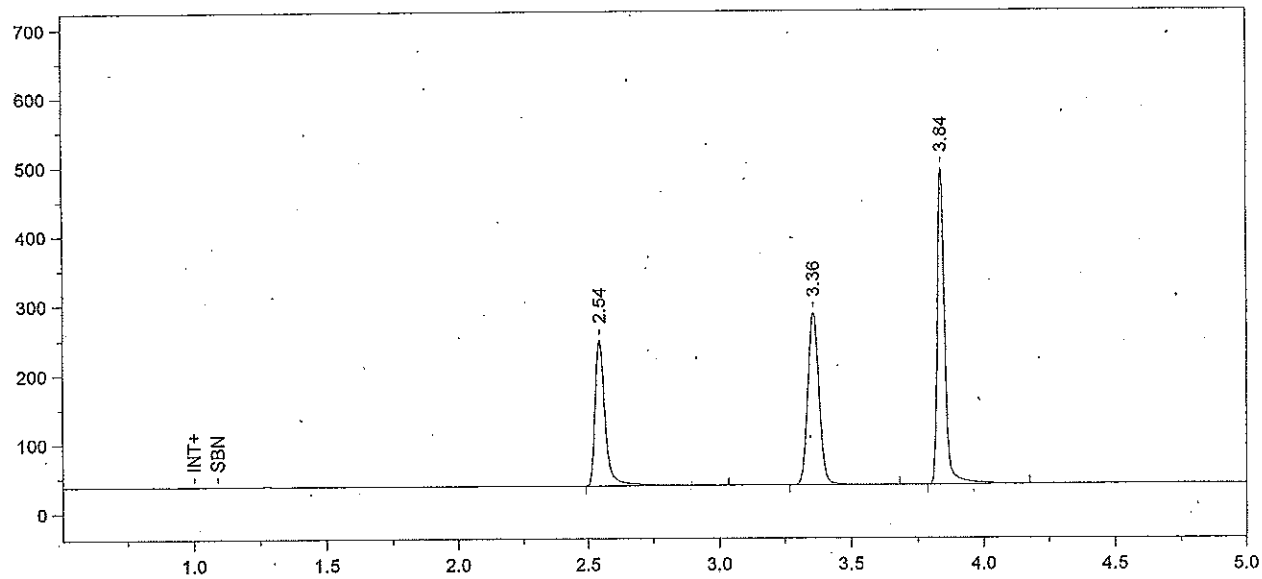
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	563184	0.1250	0.1020
2	3.36	t-Butanol	713367	0.9870	0.8055
3	3.84	n-Propanol	857027	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/27/2011
Today's Time = 7:21:16 PM
Bound File Name = Sim102711.0008.RAW
Sample Name = 0.1 Sim Sol - SRM
Date Taken = 10/27/2011 7:21:14 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 124

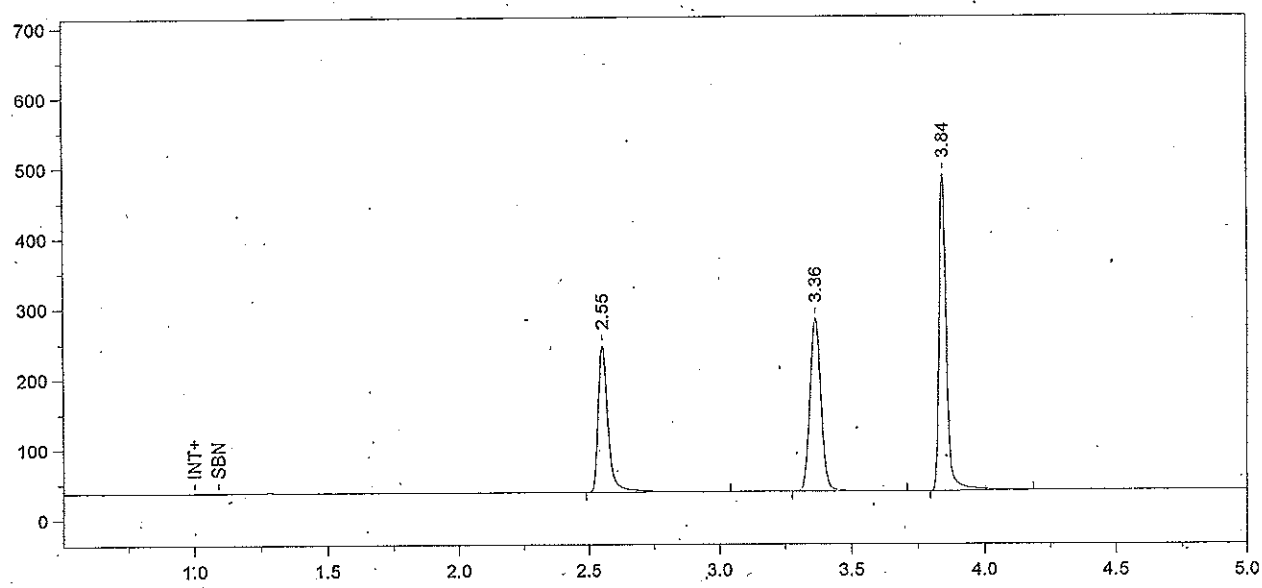
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	550739	0.1232	0.1006
2	3.36	t-Butanol	712580	0.9942	0.8115
3	3.84	n-Propanol	849811	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/27/2011 Today's Time = 7:36:11 PM
Bound File Name = Sim102711.0009.RAW
Sample Name = 0.1 Sim Sol - SRM
Date Taken = 10/27/2011 7:36:09 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 124

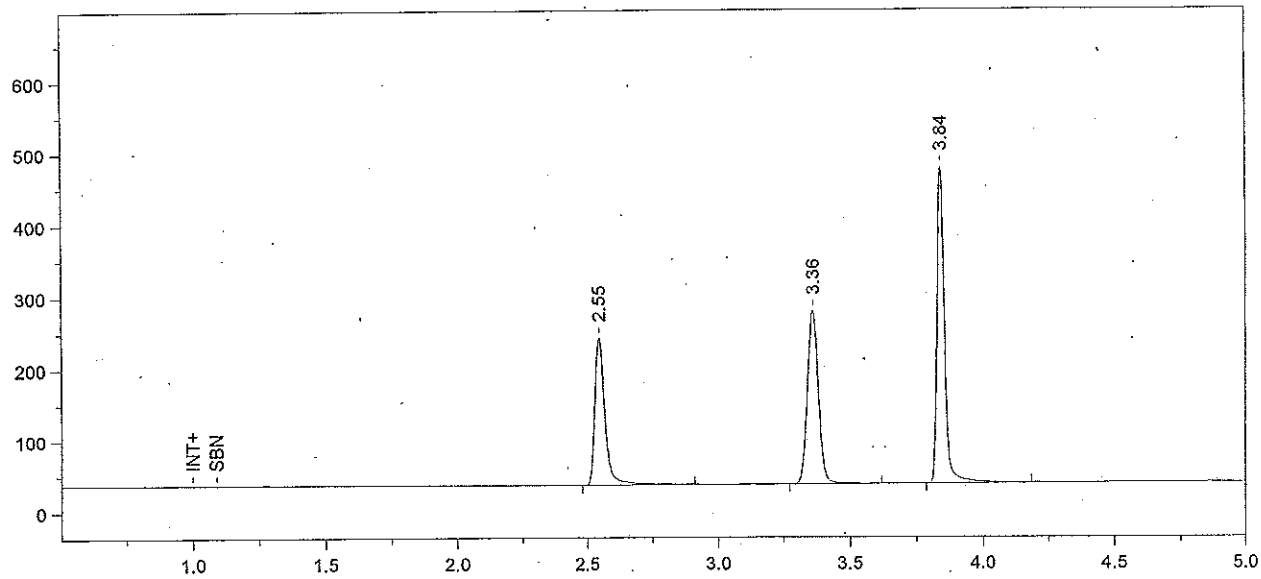
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.54	Ethanol	574833	0.1245	0.1016
2	3.36	t-Butanol	738914	0.9982	0.8148
3	3.84	n-Propanol	877684	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/27/2011
Today's Time = 7:51:12 PM
Bound File Name = Sim102711.0010.RAW
Sample Name = 0.1 Sim Sol - KLK
Date Taken = 10/27/2011 7:51:10 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 124

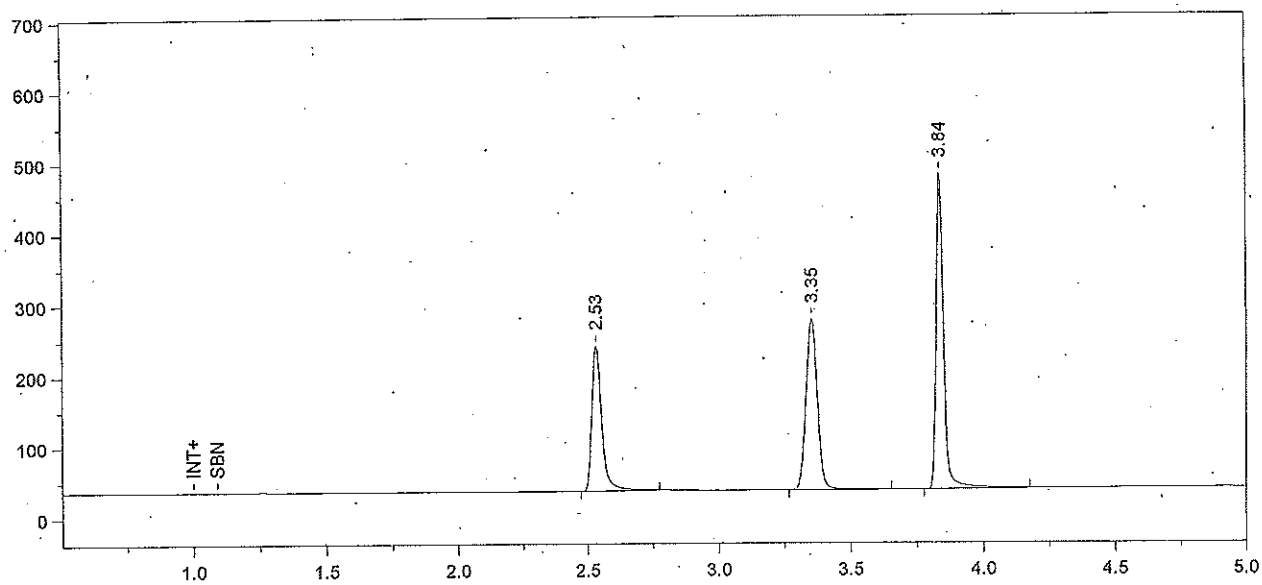
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	565951	0.1244	0.1015
2	3.36	t-Butanol	728291	0.9982	0.8147
3	3.84	n-Propanol	865104	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/27/2011
Today's Time = 8:06:14 PM
Bound File Name = Sim102711.0011.RAW
Sample Name = 0.1 Sim Sol - KLK
Date Taken = 10/27/2011 8:06:11 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 124

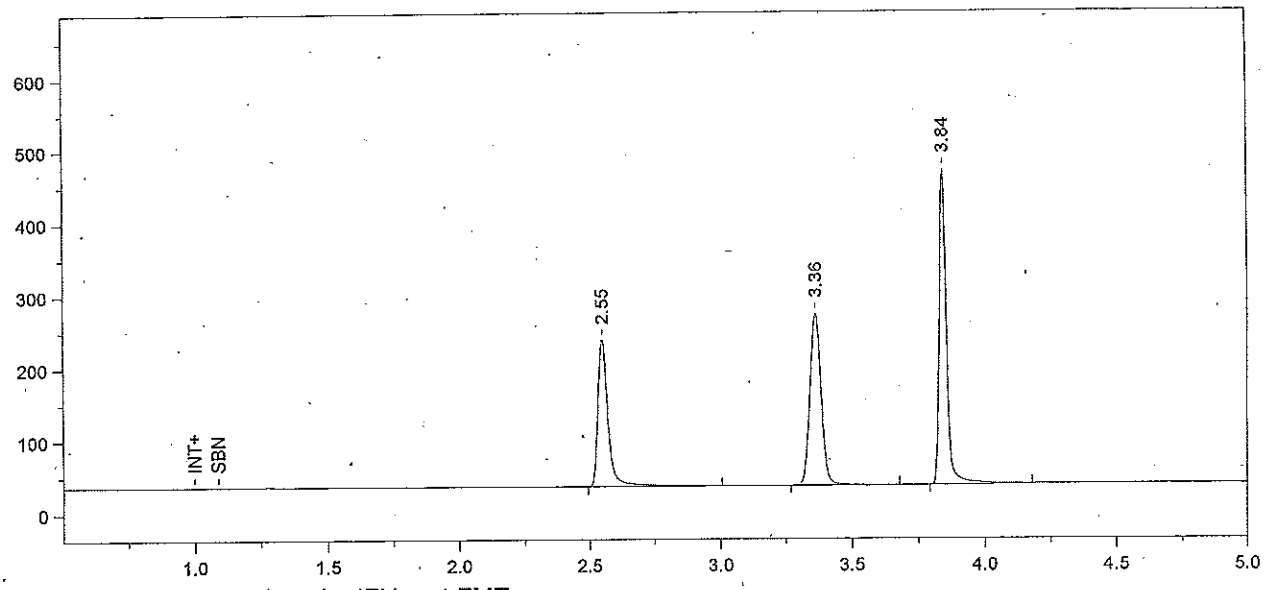
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	553781	0.1238	0.1010
2	3.36	t-Butanol	713626	0.9945	0.8117
3	3.84	n-Propanol	850803	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/27/2011
Today's Time = 8:21:21 PM
Bound File Name = Sim102711.0012.RAW
Sample Name = 0.1 Sim Sol - KLK
Date Taken = 10/27/2011 8:21:13 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 124

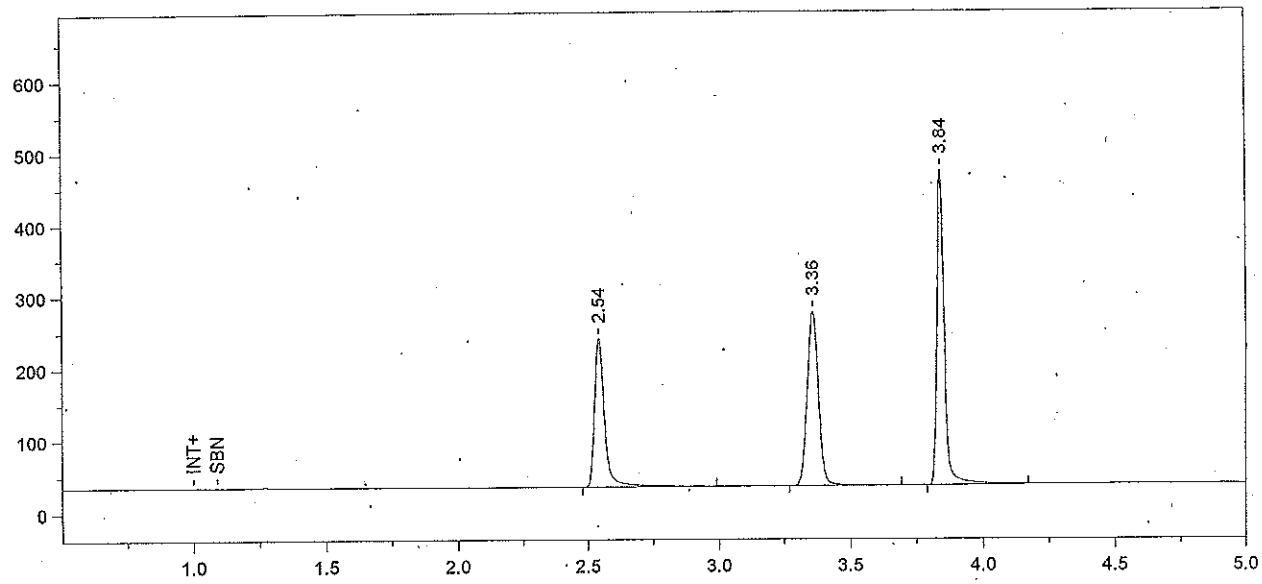
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.53	Ethanol	545024	0.1209	0.0987
2	3.35	t-Butanol	718011	0.9932	0.8106
3	3.84	n-Propanol	857200	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/27/2011
Today's Time = 8:36:18 PM
Bound File Name = Sim102711.0013.RAW
Sample Name = 0.1 Sim Sol - KLK
Date Taken = 10/27/2011 8:36:16 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 124

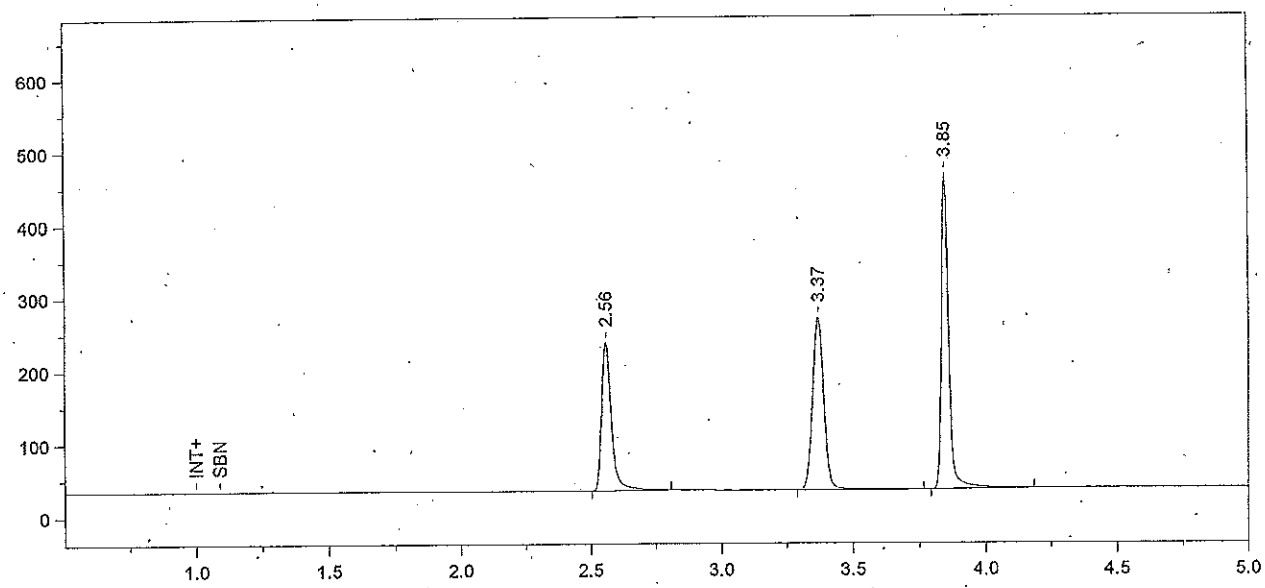
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	548404	0.1248	0.1019
2	3.36	t-Butanol	700622	0.9941	0.8114
3	3.84	n-Propanol	835657	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/27/2011
Today's Time = 8:51:23 PM
Bound File Name = Sim102711.0014.RAW
Sample Name = 0.1 Sim Sol - KLK
Date Taken = 10/27/2011 8:51:17 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 124

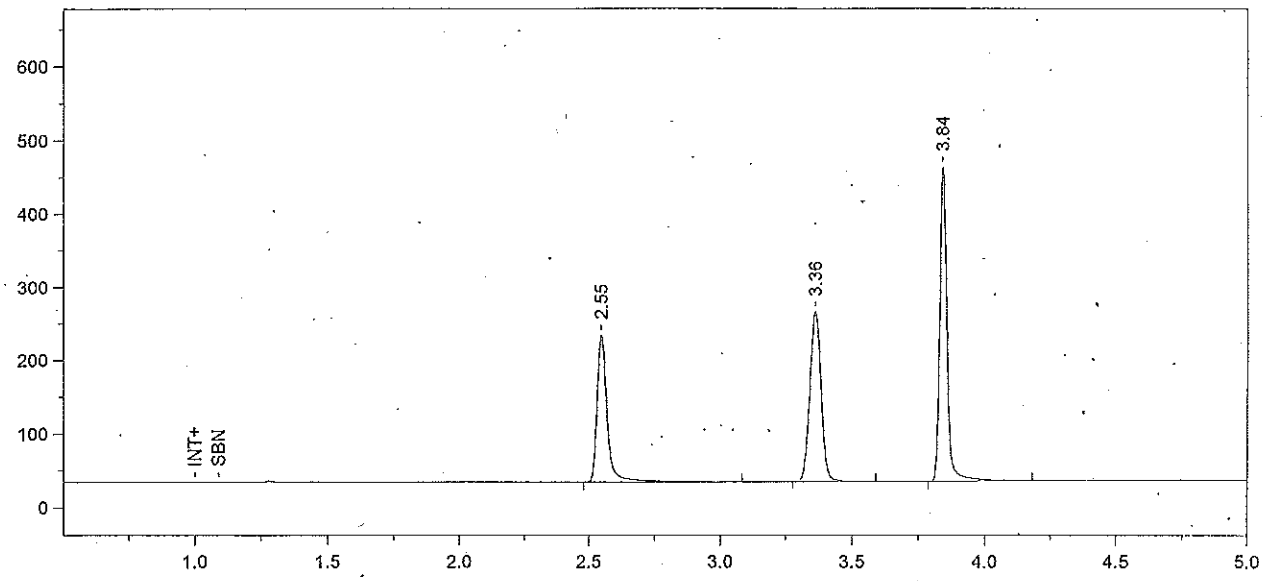
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.54	Ethanol	554332	0.1241	0.1013
2	3.36	t-Butanol	714490	0.9972	0.8139
3	3.84	n-Propanol	849534	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/27/2011
Today's Time = 9:06:22 PM
Bound File Name = Sim102711.0015.RAW
Sample Name = 0.1 Sim Sol - KLK
Date Taken = 10/27/2011 9:06:18 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 124

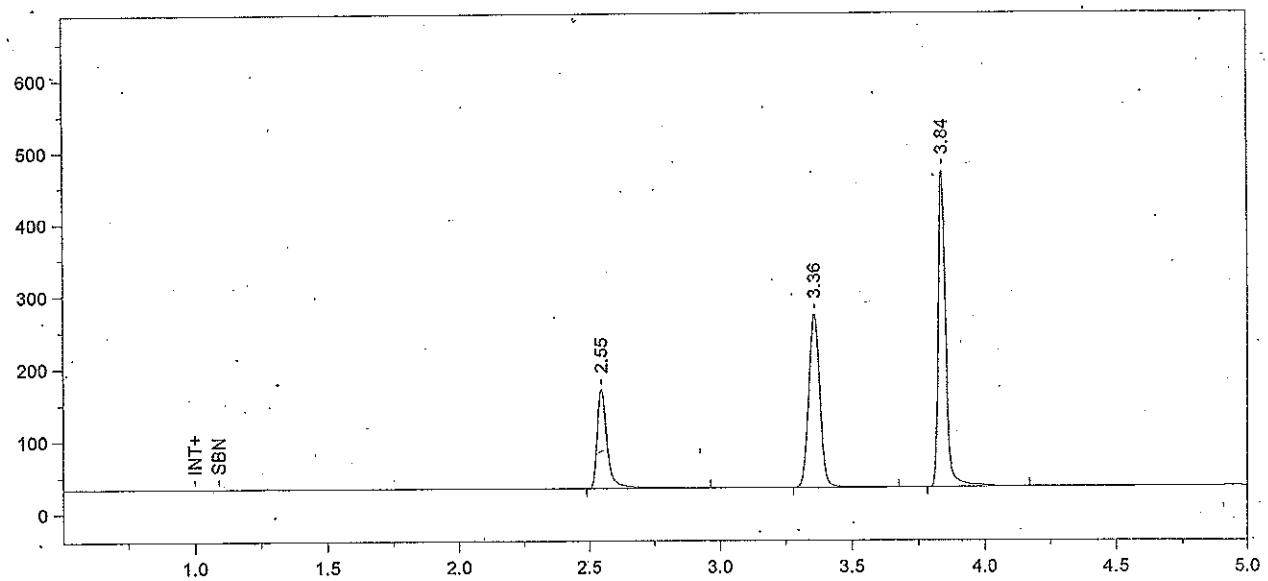
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.56	Ethanol	532155	0.1220	0.0996
2	3.37	t-Butanol	695267	0.9942	0.8115
3	3.85	n-Propanol	829196	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/27/2011 Today's Time = 9:21:21 PM
Bound File Name = Sim102711.0016.RAW
Sample Name = 0.1 Sim Sol - KLK
Date Taken = 10/27/2011 9:21:19 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 124

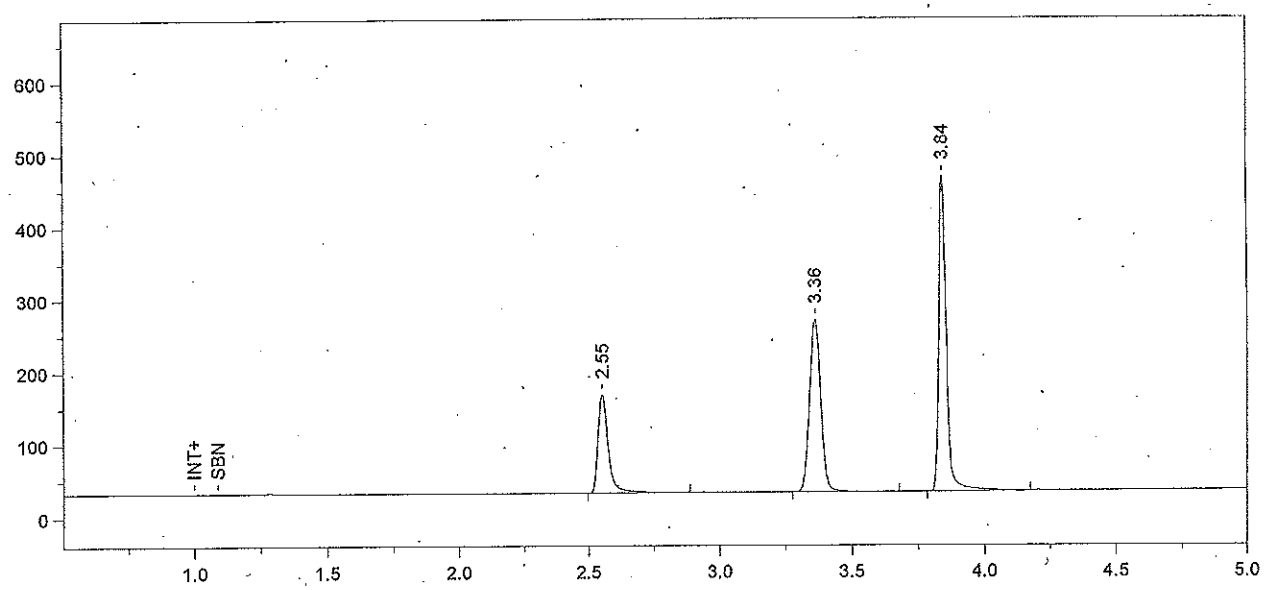
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	543454	0.1253	0.1023
2	3.36	t-Butanol	687118	0.9881	0.8065
3	3.84	n-Propanol	824494	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/27/2011
Today's Time = 9:36:22 PM
Bound File Name = Sim102711.0017.RAW
Sample Name = CCS B
Date Taken = 10/27/2011 9:36:21 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 124

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	372677	0.0841	0.0686
2	3.36	t-Butanol	703063	0.9889	0.8072
3	3.84	n-Propanol	842962	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/27/2011
Today's Time = 9:51:27 PM
Bound File Name = Sim102711.0018.RAW
Sample Name = CCS B
Date Taken = 10/27/2011 9:51:20 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 124

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	366432	0.0829	0.0677
2	3.36	t-Butanol	703844	0.9932	0.8107
3	3.84	n-Propanol	840245	1.0000	0.8162

File Name: C:\Methods\SimSolution.cal
Version: 129

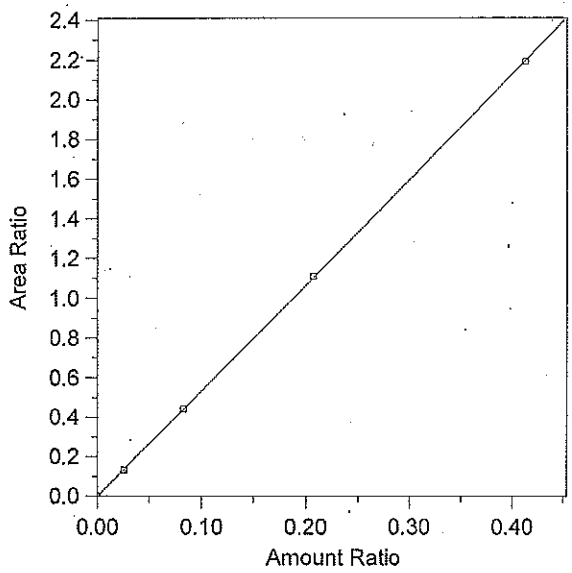
Creator:
Description:
Reason for change:

Internal standard calibration
No injection volume correction
No sample weight correction
Area reject threshold: 15000
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:	2.568 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

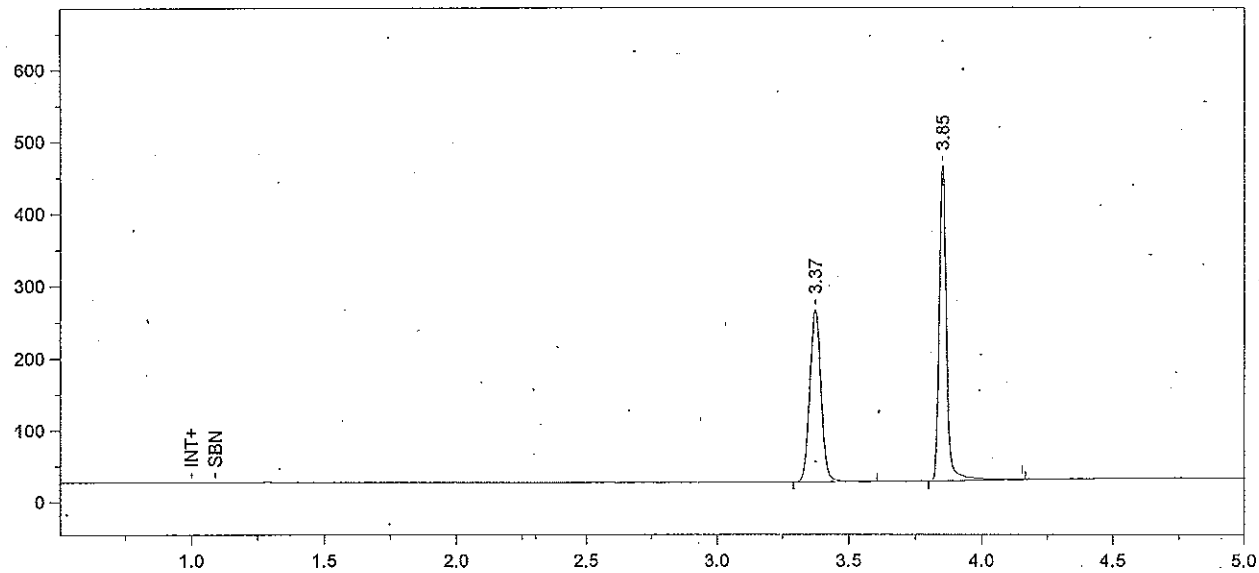
Single peak quantification by area

Y = 5.322551 X + 0

Linear fit with equal weighting, forced to origin

Coefficient of determination:	0.9999792
Average error:	0.747%
Average CF:	4.241401
RSD:	55.924%

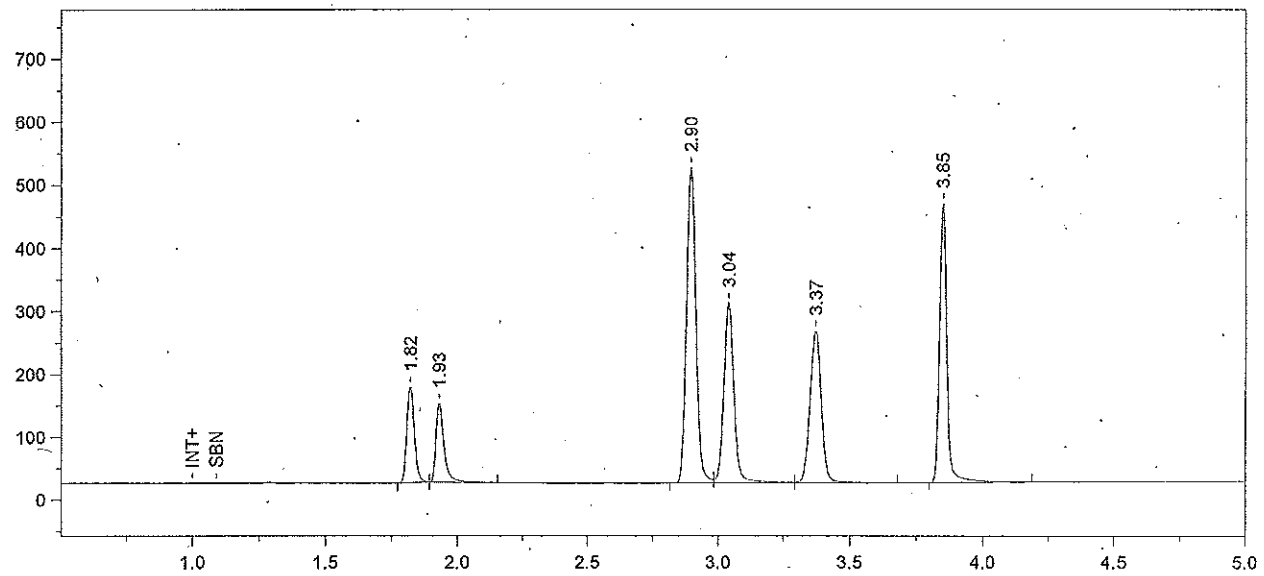
Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source	Date and time
1	0	(0)	--	0.000	0	0	Manual	4/11/2005 10:03:40 AM
2	0.0257	111739.6	4347845	-2.494	0.0257	0.1333782	C:\Alcohol Data\Sim102811\Sim102811.0003.BND	10/28/2011 9:57:21 AM
3	0.0828	387535.9	4680386	0.518	0.0828	0.4429896	C:\Alcohol Data\Sim102811\Sim102811.0009.BND	10/28/2011 11:43:39 AM
4	0.2072	932359.4	4499804	0.567	0.2072	1.109085	C:\Alcohol Data\Sim102811\Sim102811.0005.BND	10/28/2011 10:27:24 AM
5	0.4126	1845908	4473844	-0.154	0.4126	2.192699	C:\Alcohol Data\Sim102811\Sim102811.0006.BND	10/28/2011 10:36:15 AM



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/28/2011
Today's Time = 11:46:27 AM
Bound File Name = Sim102811.0001.RAW
Sample Name = Blank
Date Taken = 10/28/2011 9:27:36 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 129

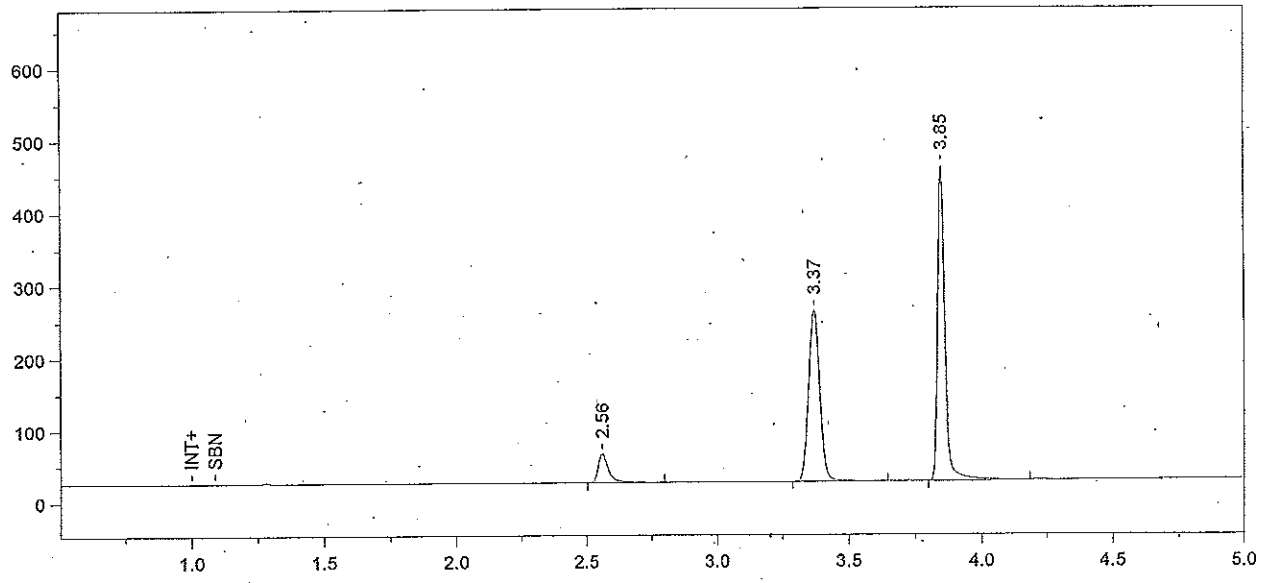
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	3.37	t-Butanol	704526	1.0035	0.8190
2	3.85	n-Propanol	839784	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/28/2011 Today's Time = 11:46:31 AM
Bound File Name = Sim102811.0002.RAW
Sample Name = TMX
Date Taken = 10/28/2011 9:42:06 AM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 129

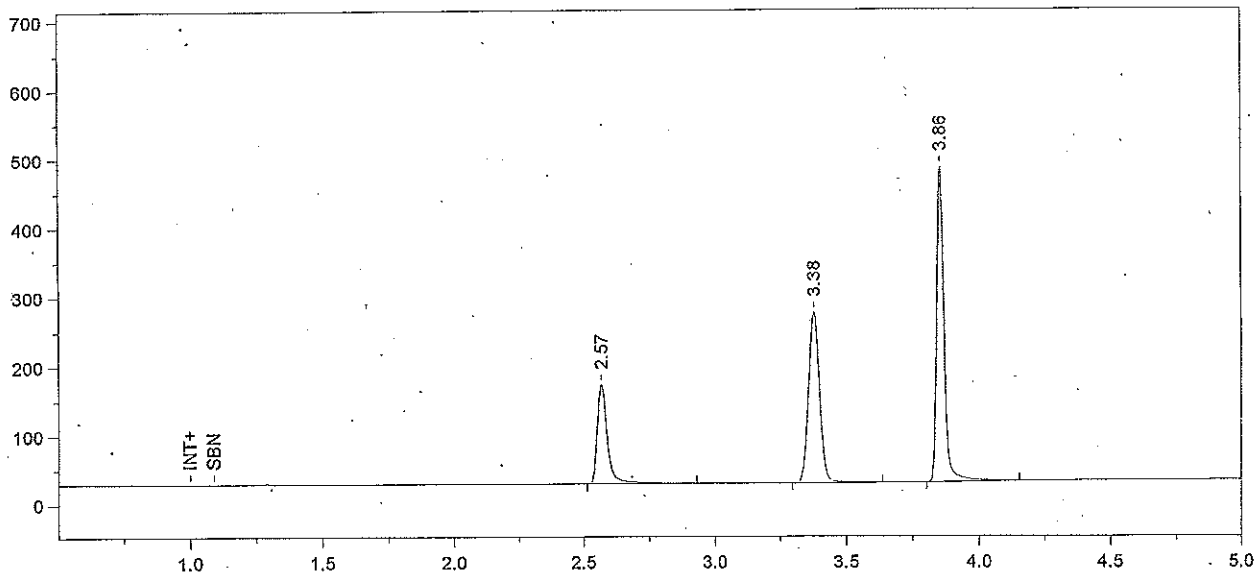
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	1.82	Acetaldehyde	304027	0.0510	0.0416
2	1.93	Methanol	264946	0.1280	0.1045
3	2.90	Acetone	1246487	0.0600	0.0490
4	3.04	Isopropanol	778247	0.0810	0.0661
5	3.37	t-Butanol	717901	1.0123	0.8262
6	3.85	n-Propanol	848255	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/28/2011
Today's Time = 11:46:34 AM
Bound File Name = Sim102811.0003.RAW
Sample Name = Std A
Date Taken = 10/28/2011 9:57:14 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 129

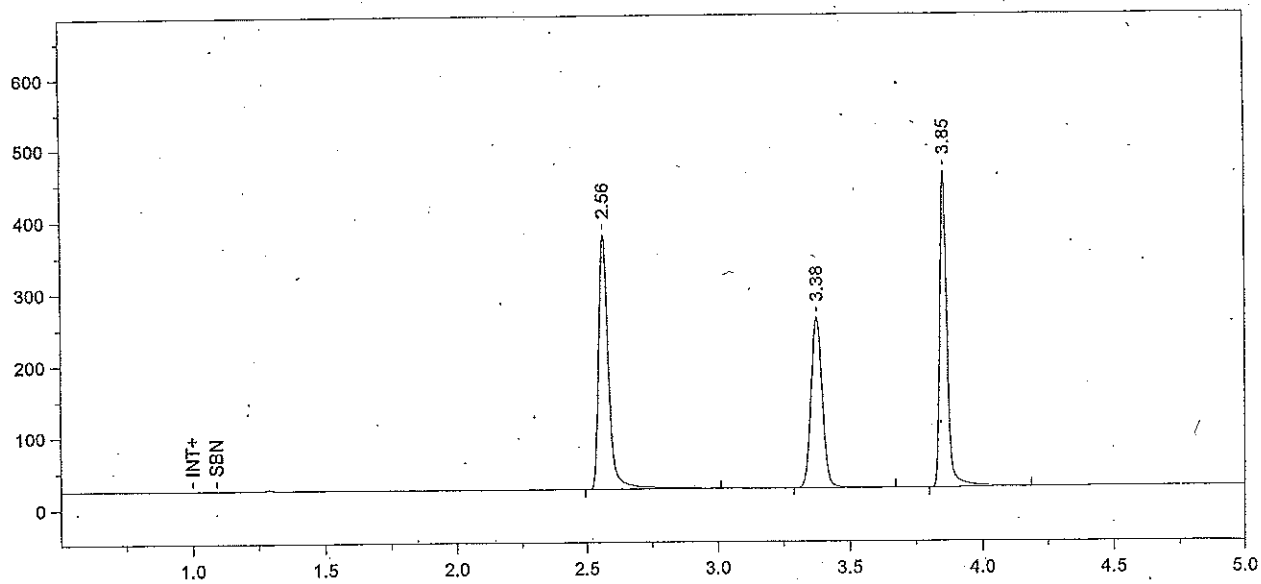
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.56	Ethanol	111740	0.0251	0.0205
2	3.37	t-Butanol	703151	1.0039	0.8194
3	3.85	n-Propanol	837765	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/28/2011
Today's Time = 11:46:50 AM
Bound File Name = Sim102811.0009.RAW
Sample Name = Std B
Date Taken = 10/28/2011 11:43:36 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 129

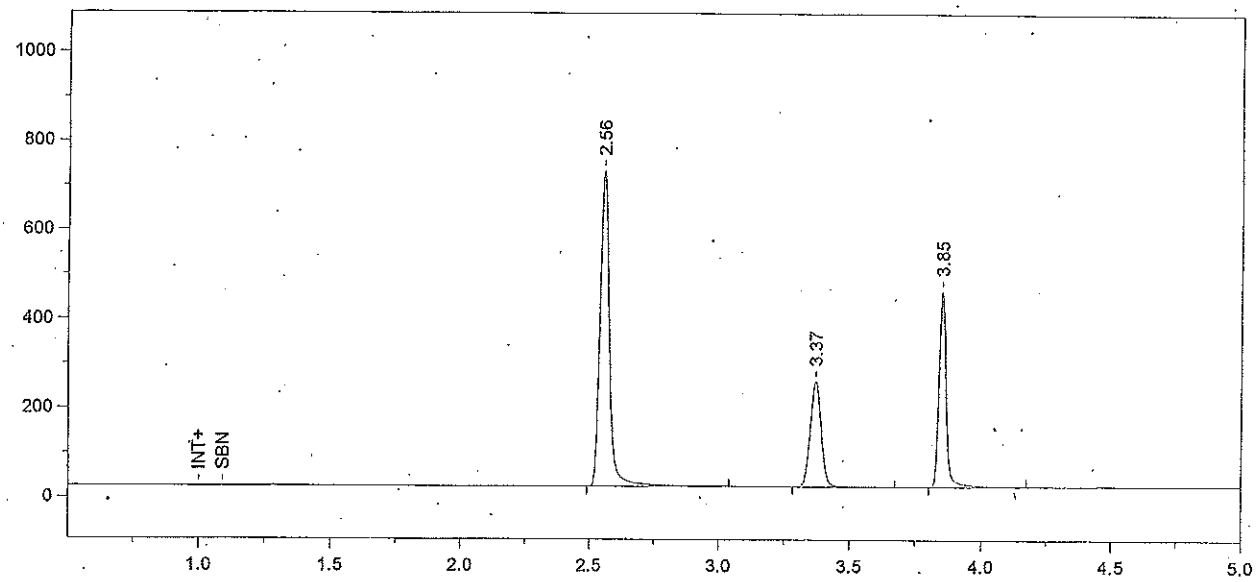
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.57	Ethanol	387536	0.0832	0.0679
2	3.38	t-Butanol	728248	0.9957	0.8127
3	3.86	n-Propanol	874819	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/28/2011
Today's Time = 11:46:39 AM
Bound File Name = Sim102811.0005.RAW
Sample Name = Std C
Date Taken = 10/28/2011 10:27:17 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 129

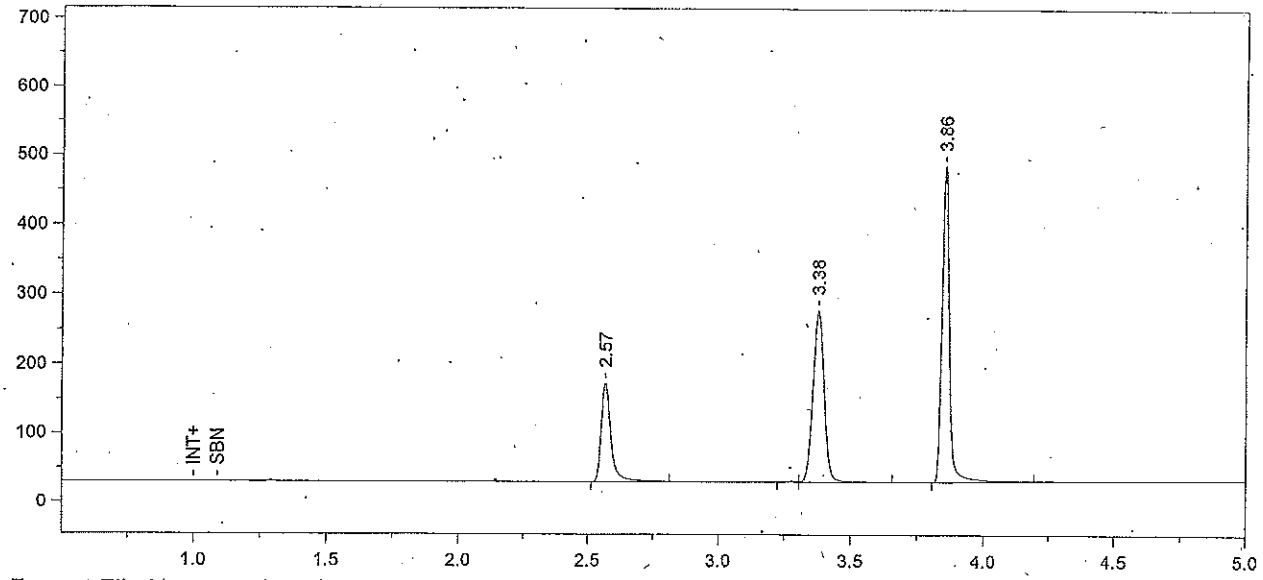
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.56	Ethanol	932359	0.2084	0.1701
2	3.38	t-Butanol	699479	0.9952	0.8123
3	3.85	n-Propanol	840656	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/28/2011
Today's Time = 11:46:42 AM
Bound File Name = Sim102811.0006.RAW
Sample Name = Std D
Date Taken = 10/28/2011 10:36:13 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 129

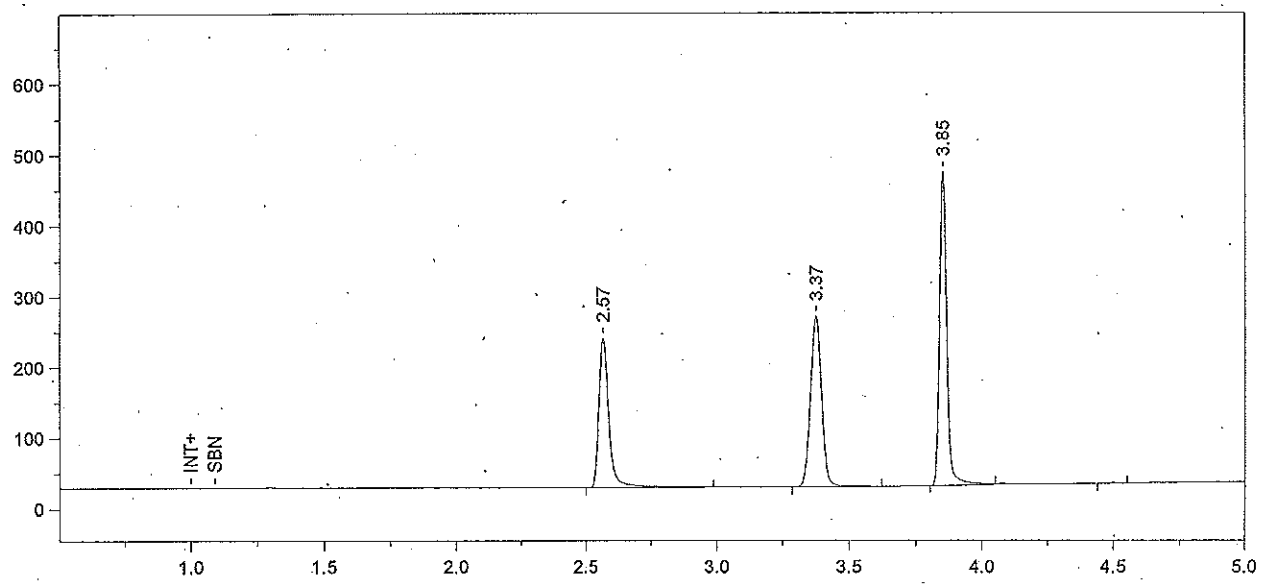
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.56	Ethanol	1845908	0.4120	0.3362
2	3.37	t-Butanol	698736	0.9928	0.8103
3	3.85	n-Propanol	841843	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/28/2011 Today's Time = 11:46:47 AM
Bound File Name = Sim102811.0008.RAW
Sample Name = AQ QC
Date Taken = 10/28/2011 11:05:57 AM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 129

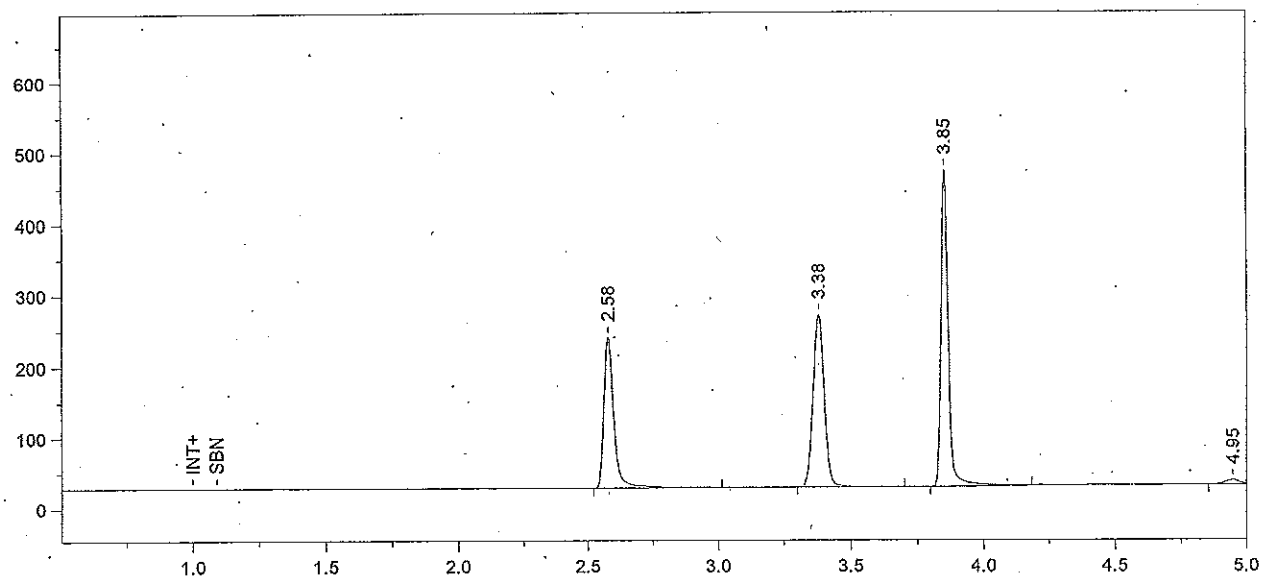
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.57	Ethanol	380293	0.0812	0.0663
3	3.38	t-Butanol	729293	0.9914	0.8092
4	3.86	n-Propanol	879919	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/28/2011 Today's Time = 3:46:08 PM
Bound File Name = Sim102811(1).0009.RAW
Sample Name = 0.10 % JFH
Date Taken = 10/28/2011 3:46:03 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 129

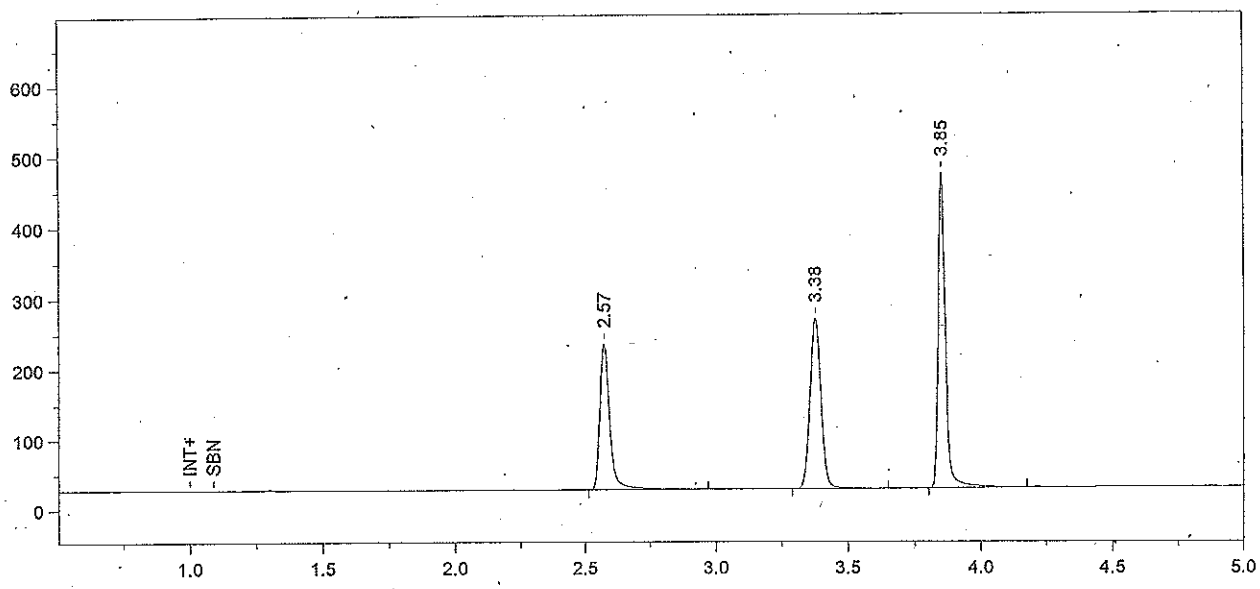
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.57	Ethanol	563455	0.1258	0.1026
2	3.37	t-Butanol	710931	1.0102	0.8245
3	3.85	n-Propanol	841788	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/28/2011 Today's Time = 4:01:09 PM
Bound File Name = Sim102811(1).0010.RAW
Sample Name = 0.10 % JFH
Date Taken = 10/28/2011 4:01:04 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 129

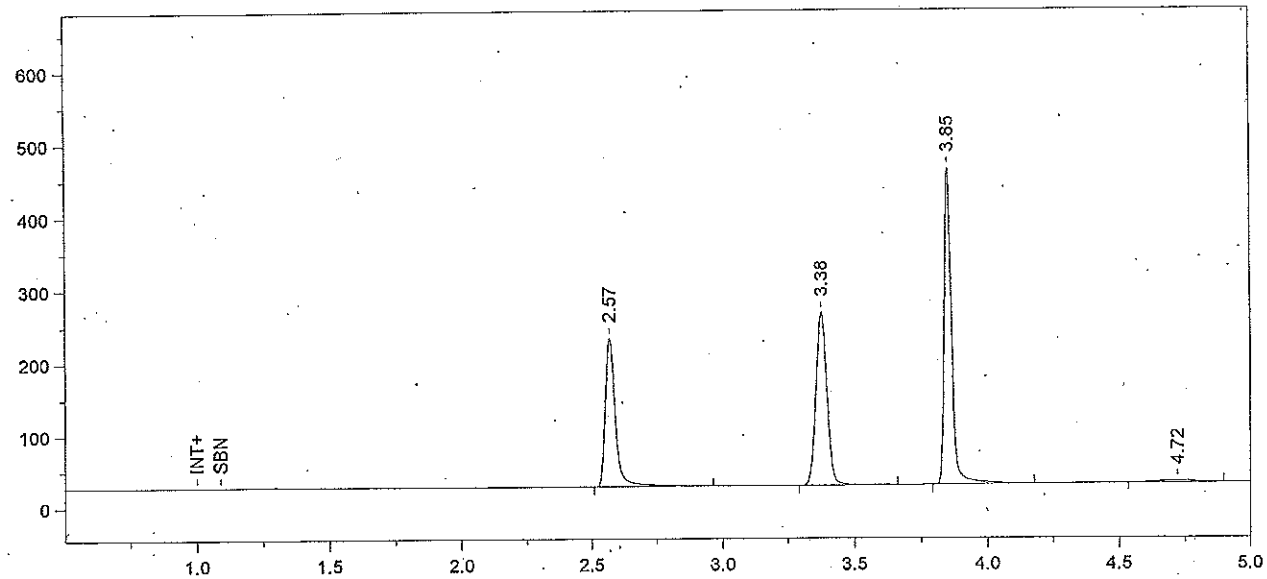
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.58	Ethanol	558770	0.1241	0.1013
2	3.38	t-Butanol	710011	1.0036	0.8191
3	3.85	n-Propanol	846229	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/28/2011 Today's Time = 4:16:08 PM
Bound File Name = Sim102811(1).0011.RAW
Sample Name = 0.10 % JFH
Date Taken = 10/28/2011 4:16:05 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 129

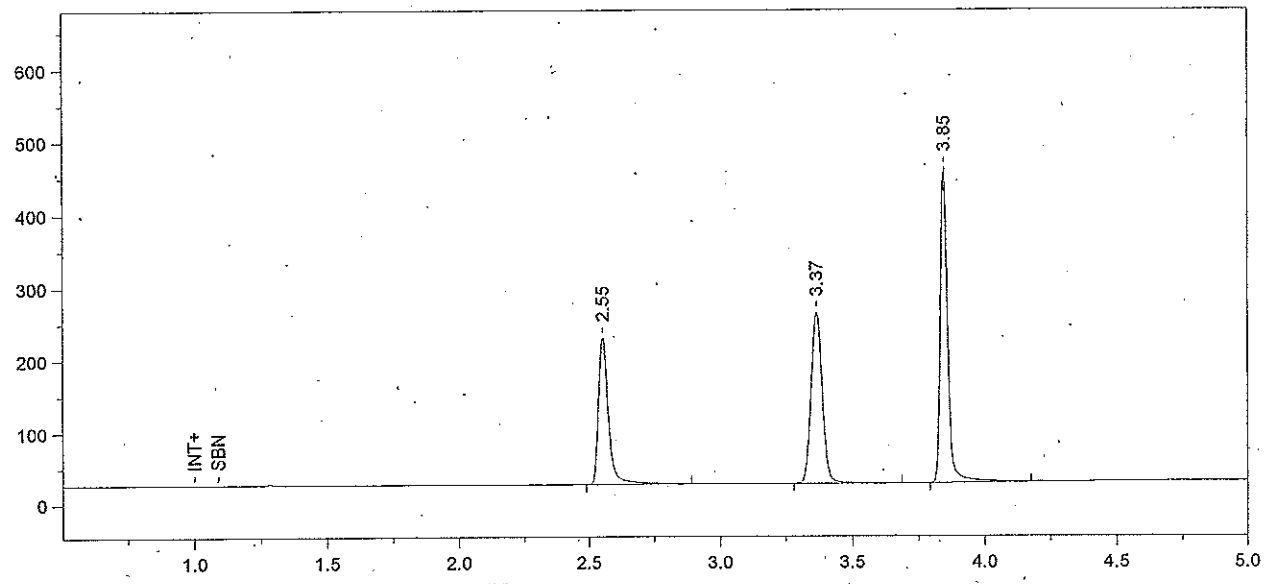
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.57	Ethanol	555485	0.1229	0.1003
2	3.38	t-Butanol	711972	1.0028	0.8185
3	3.85	n-Propanol	849233	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/28/2011
Today's Time = 4:31:11 PM
Bound File Name = Sim102811(1).0012.RAW
Sample Name = 0.10 % JFH
Date Taken = 10/28/2011 4:31:06 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 129

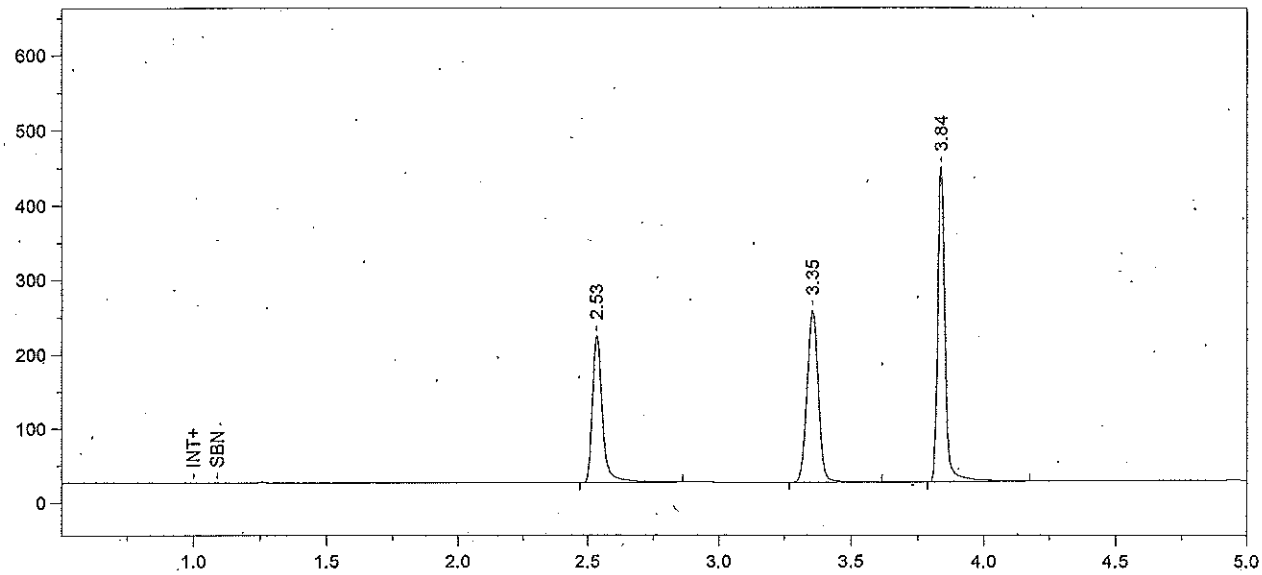
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.57	Ethanol	547419	0.1219	0.0995
2	3.38	t-Butanol	700647	0.9936	0.8110
3	3.85	n-Propanol	843424	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/28/2011 Today's Time = 4:46:10 PM
Bound File Name = Sim102811(1).0013.RAW
Sample Name = 0.10 % JFH
Date Taken = 10/28/2011 4:46:07 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 129

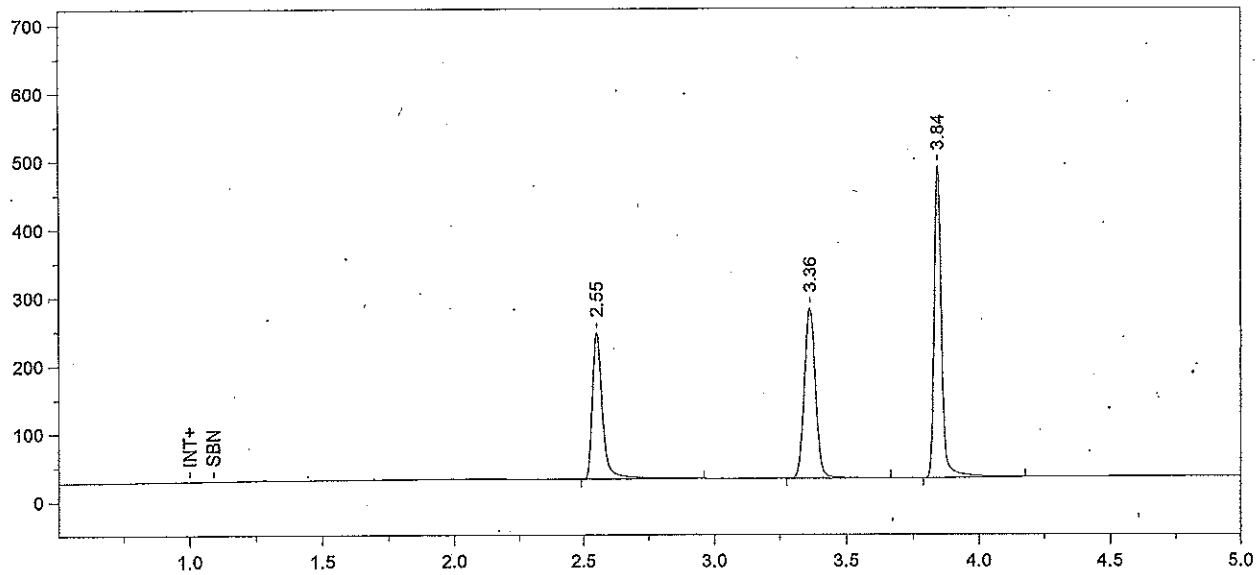
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	541884	0.1220	0.0996
2	3.37	t-Butanol	699808	1.0028	0.8185
3	3.85	n-Propanol	834720	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/28/2011 Today's Time = 5:01:08 PM
Bound File Name = Sim102811.0014.RAW
Sample Name = 0.10 % JFH
Date Taken = 10/28/2011 5:01:06 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 129

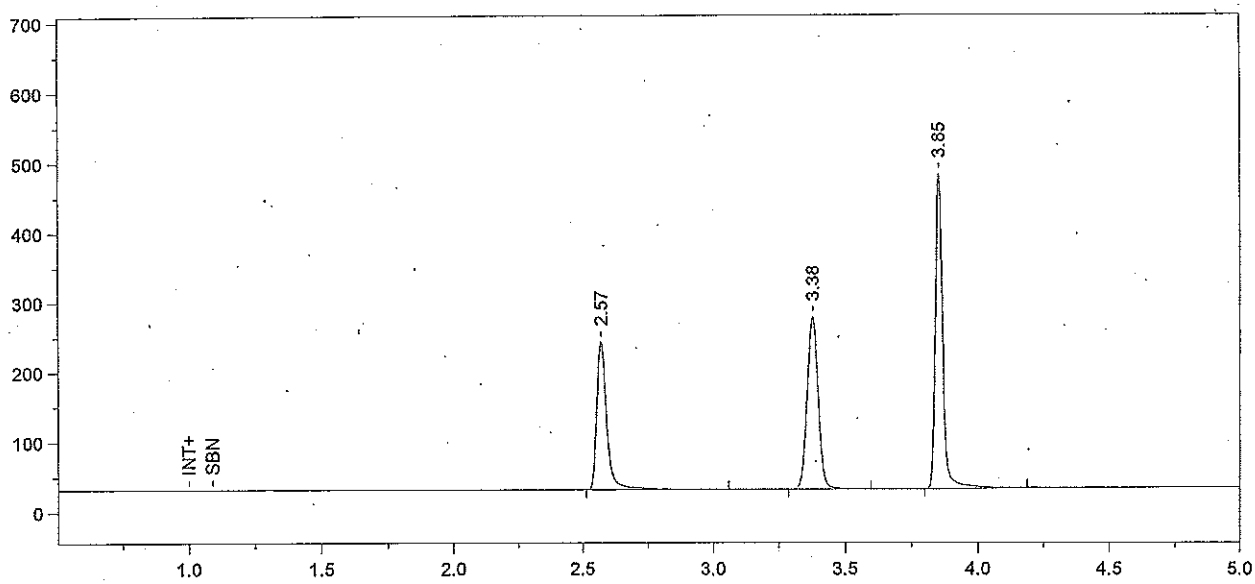
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.53	Ethanol	535381	0.1219	0.0995
2	3.35	t-Butanol	689509	0.9994	0.8157
3	3.84	n-Propanol	825236	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/28/2011
Today's Time = 5:16:19 PM
Bound File Name = Sim102811.0015.RAW
Sample Name = 0.10 % JFH
Date Taken = 10/28/2011 5:16:13 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 129

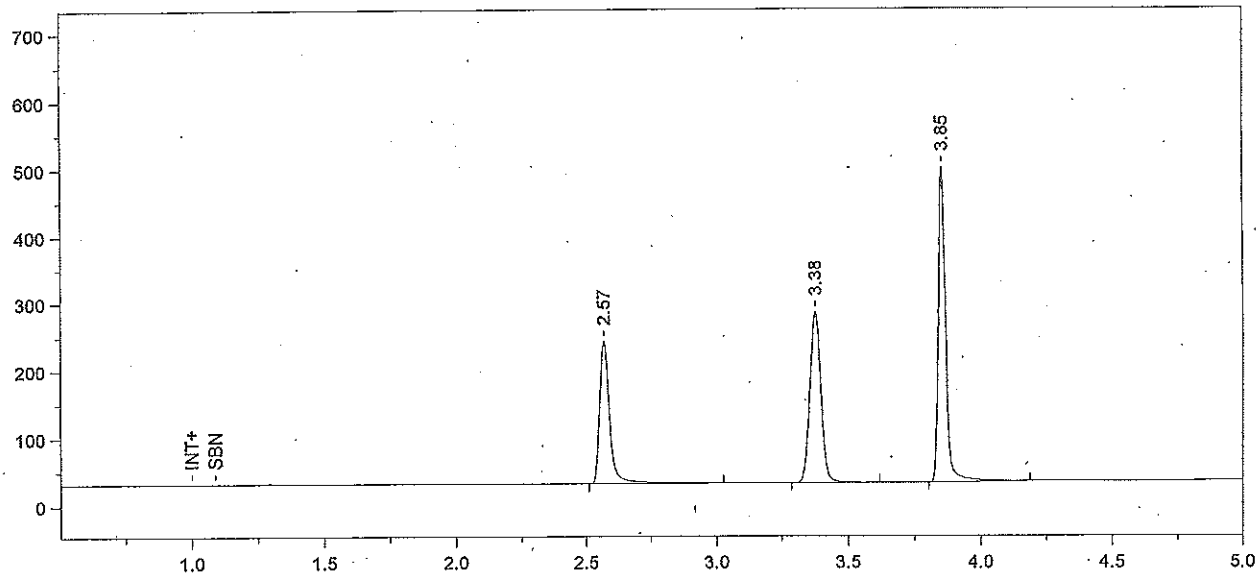
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	575177	0.1229	0.1003
2	3.36	t-Butanol	739389	1.0056	0.8208
3	3.84	n-Propanol	879463	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/28/2011 Today's Time = 5:31:16 PM
Bound File Name = Sim102811.0016.RAW
Sample Name = 0.10 % KLK
Date Taken = 10/28/2011 5:31:14 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 129

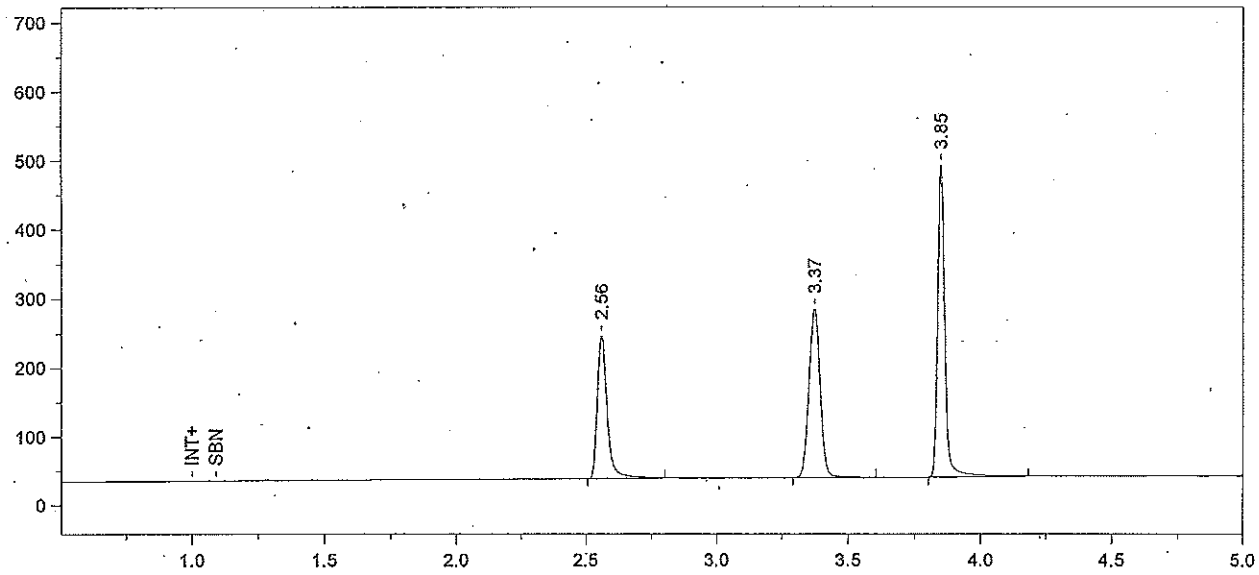
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.57	Ethanol	566200	0.1232	0.1006
2	3.38	t-Butanol	719904	0.9974	0.8141
3	3.85	n-Propanol	863351	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/28/2011 Today's Time = 5:46:15 PM
Bound File Name = Sim102811.0017.RAW
Sample Name = 0.10 % KLK
Date Taken = 10/28/2011 5:46:09 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 129

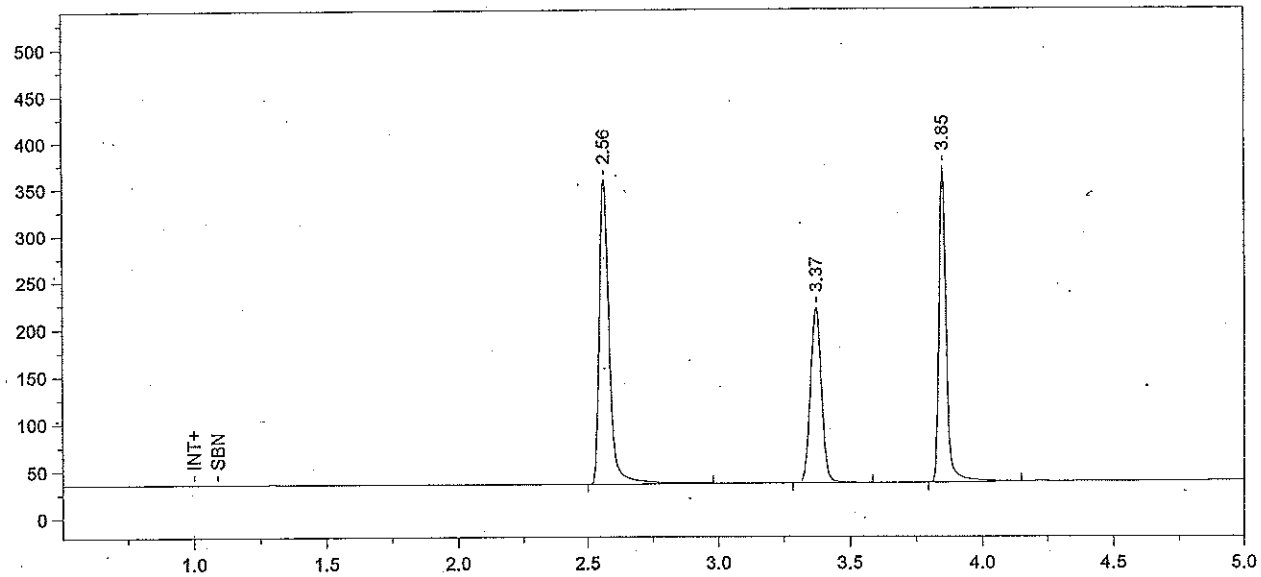
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.57	Ethanol	565404	0.1194	0.0975
2	3.38	t-Butanol	744197	1.0007	0.8168
3	3.85	n-Propanol	889511	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/28/2011 Today's Time = 6:01:16 PM
Bound File Name = Sim102811.0018.RAW
Sample Name = 0.10 % KLK
Date Taken = 10/28/2011 6:01:10 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 129

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.56	Ethanol	549375	0.1197	0.0977
2	3.37	t-Butanol	723093	1.0026	0.8183
3	3.85	n-Propanol	862648	1.0000	0.8162



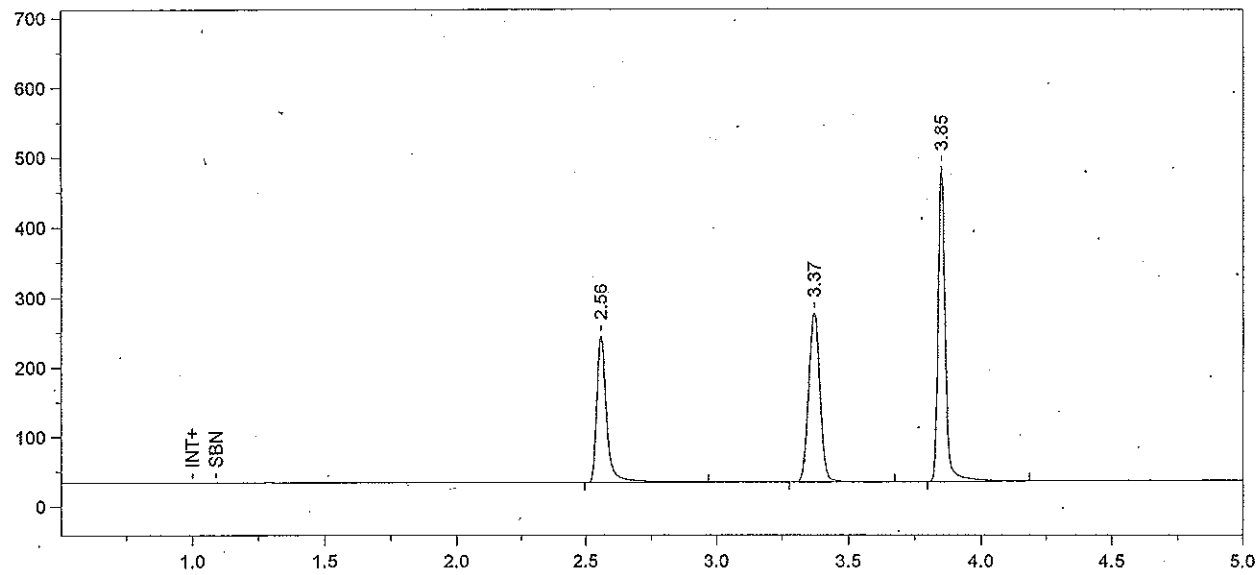
Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/28/2011 Today's Time = 6:16:15 PM
Bound File Name = Sim102811.0019.RAW
Sample Name = 0.10 % KLK
Date Taken = 10/28/2011 6:16:11 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 129

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.56	Ethanol	848675	0.2475	0.2020
2	3.37	t-Butanol	542720	1.0077	0.8225
3	3.85	n-Propanol	644194	1.0000	0.8162

Point dropped because it is apparent, from the area counts and the ethanol amount %WT/VOL, that this vial had double the amount of sample. This in turn, resulted in double the ethanol concentration and a much higher area count as compared to the rest of the vials in the run.

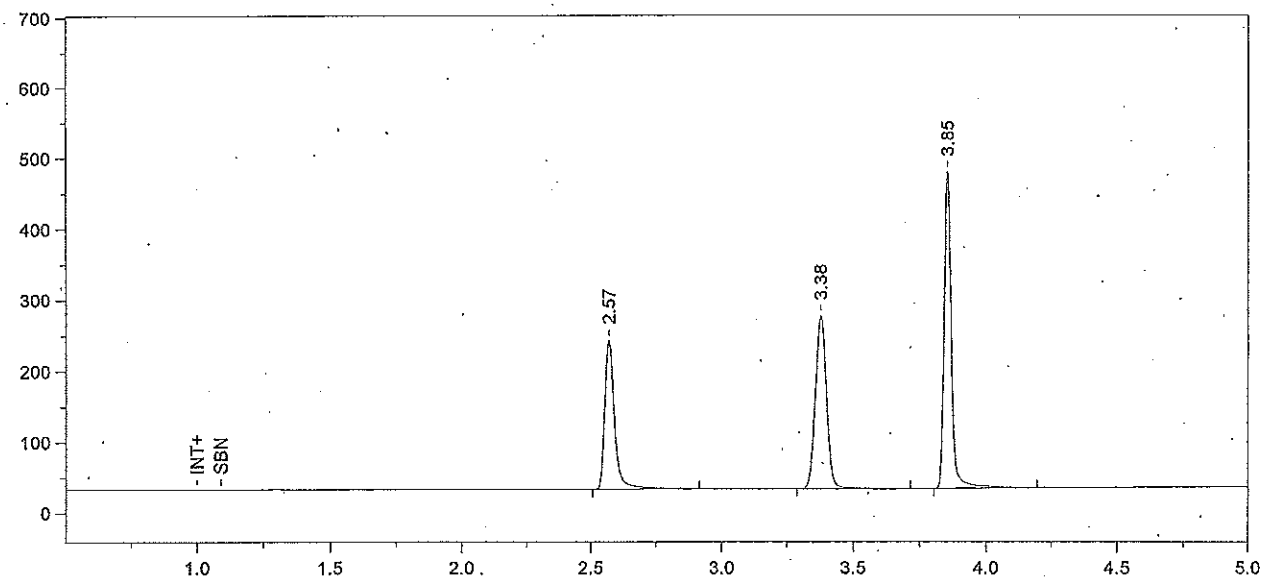
10/31/11 SAM PKK 10-31-11



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/28/2011 Today's Time = 6:31:14 PM
Bound File Name = Sim102811.0020.RAW
Sample Name = 0.10 % KLK
Date Taken = 10/28/2011 6:31:12 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 129

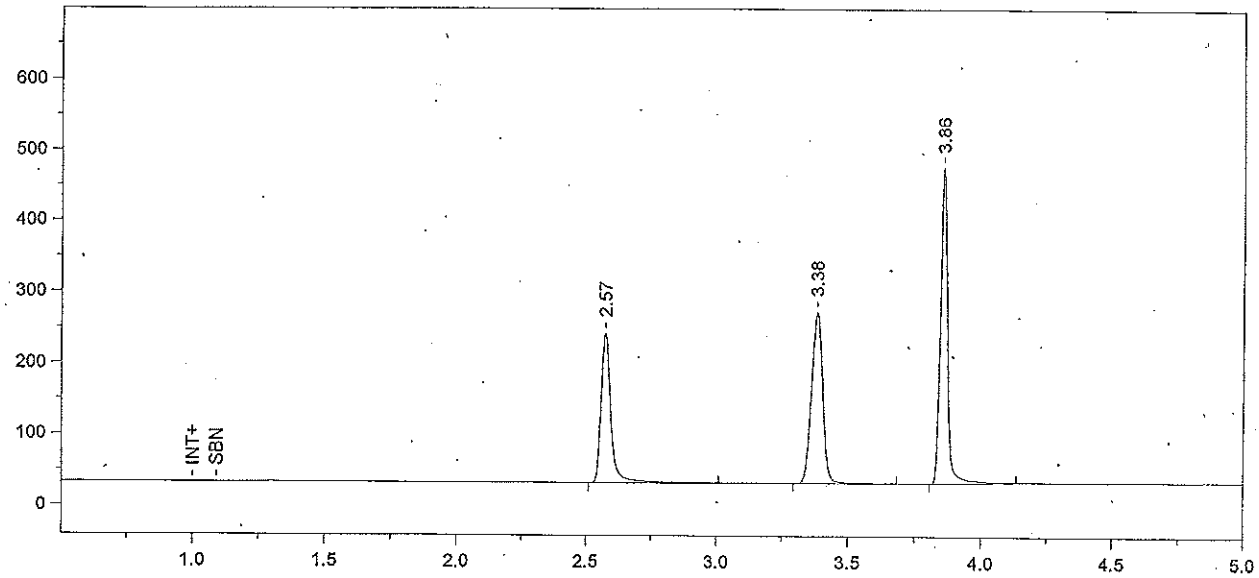
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.56	Ethanol	567388	0.1237	0.1010
2	3.37	t-Butanol	720097	0.9994	0.8157
3	3.85	n-Propanol	861816	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/28/2011 Today's Time = 6:46:17 PM
Bound File Name = Sim102811.0021.RAW
Sample Name = 0.10 % KLK
Date Taken = 10/28/2011 6:46:15 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 129

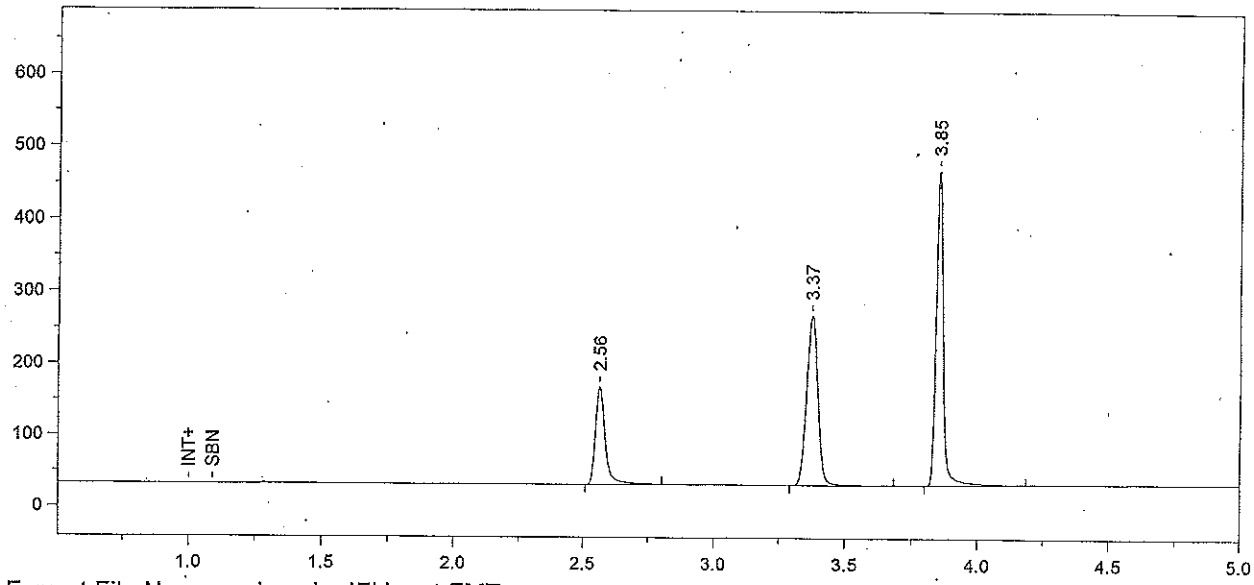
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.57	Ethanol	555750	0.1220	0.0996
2	3.38	t-Butanol	716842	1.0018	0.8176
3	3.85	n-Propanol	855918	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/28/2011
Today's Time = 7:01:22 PM
Bound File Name = Sim102811.0022.RAW
Sample Name = 0.10 % KLK
Date Taken = 10/28/2011 7:01:16 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 129

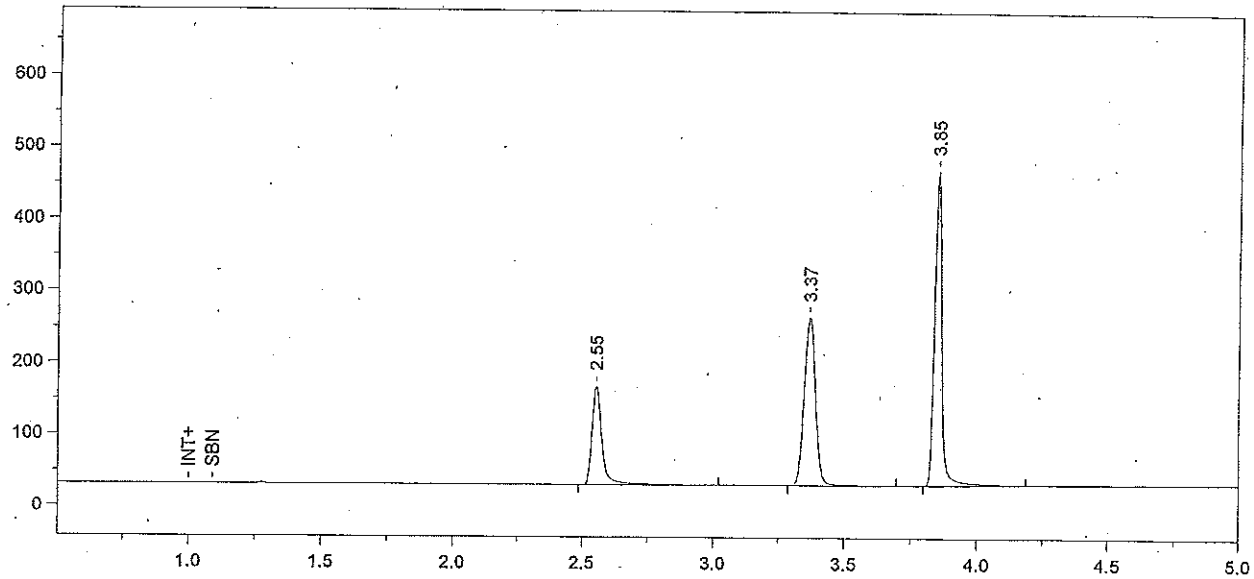
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.57	Ethanol	560516	0.1255	0.1024
2	3.38	t-Butanol	706930	1.0075	0.8223
3	3.86	n-Propanol	839275	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/28/2011
Today's Time = 7:16:25 PM
Bound File Name = Sim102811.0023.RAW
Sample Name = CCS B srm
Date Taken = 10/28/2011 7:16:18 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 129

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.56	Ethanol	364388	0.0811	0.0662
2	3.37	t-Butanol	704403	0.9985	0.8150
3	3.85	n-Propanol	843840	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 10/28/2011
Today's Time = 7:31:21 PM
Bound File Name = Sim102811.0024.RAW
Sample Name = CCS B srm
Date Taken = 10/28/2011 7:31:19 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 129

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	376976	0.0837	0.0683
2	3.37	t-Butanol	701301	0.9913	0.8091
3	3.85	n-Propanol	846246	1.0000	0.8162