Vermont Department of Health Laboratory
Organic Chemistry Program
195 Colchester Avenue, P.O. Box 1125, Burlington VT 05402-1125
(ph) 802-863-7336; (fax) 802-863-7632

Certificate of Analysis of DataMaster External Standard Solution

On 12/12/2011, 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 12-45-100 and an expiration date of 12/12/2012.

On 12/13/2011 and 12/14/2011, the solution was analyzed against calibration Cal Version #174 and Cal Version #181. 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 Thursday, December 15, 2011.

Steven Merrill

0.1 External Standard Solution 20L
Lot # 12-45-100
Prepared 12/12/2011 by SRM
Exp 12/12/2012

SRM CAL Version 174
MCS/JFH Vials
Analyzed on 12/13/2011

0.1008 mcs
0.0972
0.0990
0.0991
0.0976
0.0973
0.0999
0.1013 jfh
0.1015
0.1012
0.0980
0.1009
0.0994
0.1013

Rev. RMC 12-15-11

Ave. = 0.0996
Std Dev. = 0.0016
Range = 0.0972 - 0.1015

MCS CAL Version 181
MCS/SRM Vials
Analyzed on 12/14/2011

0.1011 mcs
0.1016
0.1024
0.1019
0.1018
0.1005
0.0996
0.1007 srm
0.1015
0.1010
0.1011
0.1014
0.1006
0.0994

Rev. RMC 12-15-11

Ave. = 0.1010
Std Dev. = 0.0008
Range = 0.0994 - 0.1024

Total Values from Both Runs

Average	Mean
0.0972	0.0972
0.0973	0.0973
0.0976	0.0976
0.0980	0.0980
0.0990	0.0990
0.0991	0.0991
0.0994	0.0994
0.0994	
0.0996	0.0996
0.0999	0.0999
0.1005	0.1005
0.1006	0.1006
0.1007	0.1007
0.1008	0.1008
0.1009	0.1009
0.1010	0.1010
0.1011	0.1011
0.1011	
0.1012	0.1012
0.1013	0.1013
0.1013	
0.1014	0.1014
0.1015	0.1015
0.1015	
0.1016	0.1016
0.1018	0.1018
0.1019	0.1019
0.1024	0.1024

Ave. =	0.1002
Std Dev. =	0.0014
Range =	0.0972 - 0.1024
Mean =	0.1001
Mean Std Dev. =	0.0015
RPD (Mean to Ave.)=	0.10%

Reviewed 12/15/11 MCS

Reviewed RMC 12-15-11

DataMaster Simulator Solution
Lot # 12-45-100 $EtOH_{aq}$ Conc: 0.100
Range: 0.095 - 0.105
Preparation Date: 12/12/2011 Expires: 12/12/2012

OPENED:

File Name: C:\Methods\SimSolution.cal
Version: 174

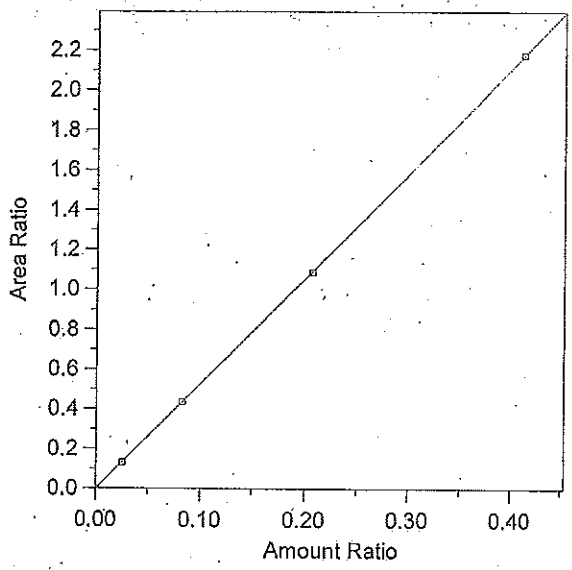
Creator:
Description:
Reason for change:

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: 2.55 minutes
Search window: 0.1 minutes
Internal standard component: 7 (n-Propanol)
No retention time reference component
Group number: 0

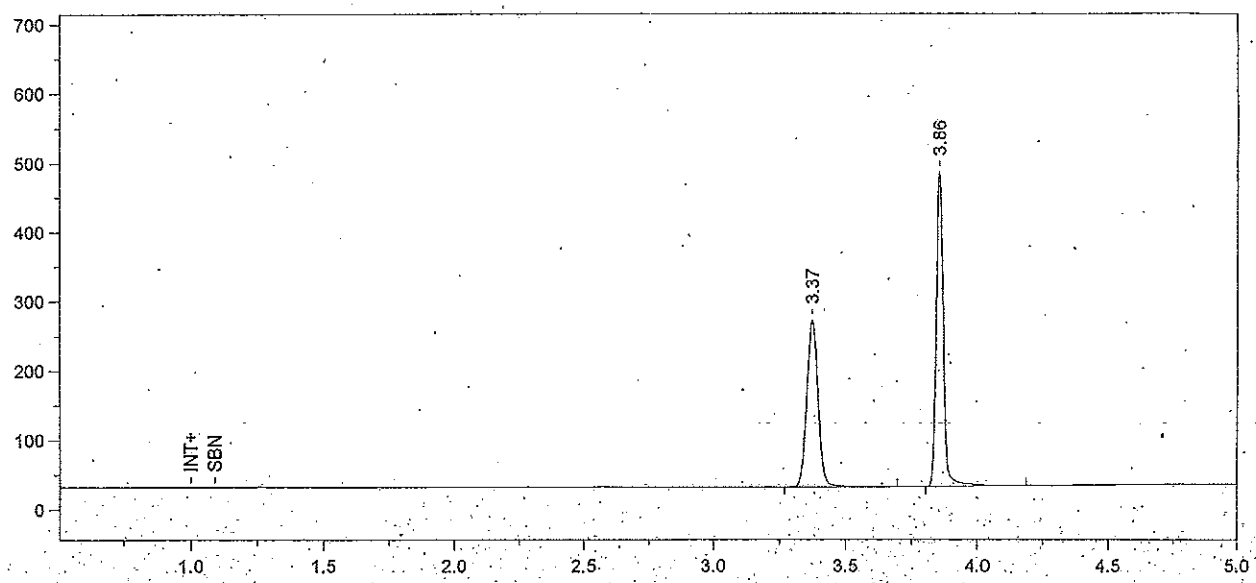
High alarm limit: 0
Low alarm limit: 0
Component constant: 0

Single peak quantification by area

Y = 5.266989 X + 0

Linear fit with equal weighting, forced to origin
Coefficient of determination: 0.9999869
Average error: 0.761%
Average CF: 4.175945
RSD: 55.926%

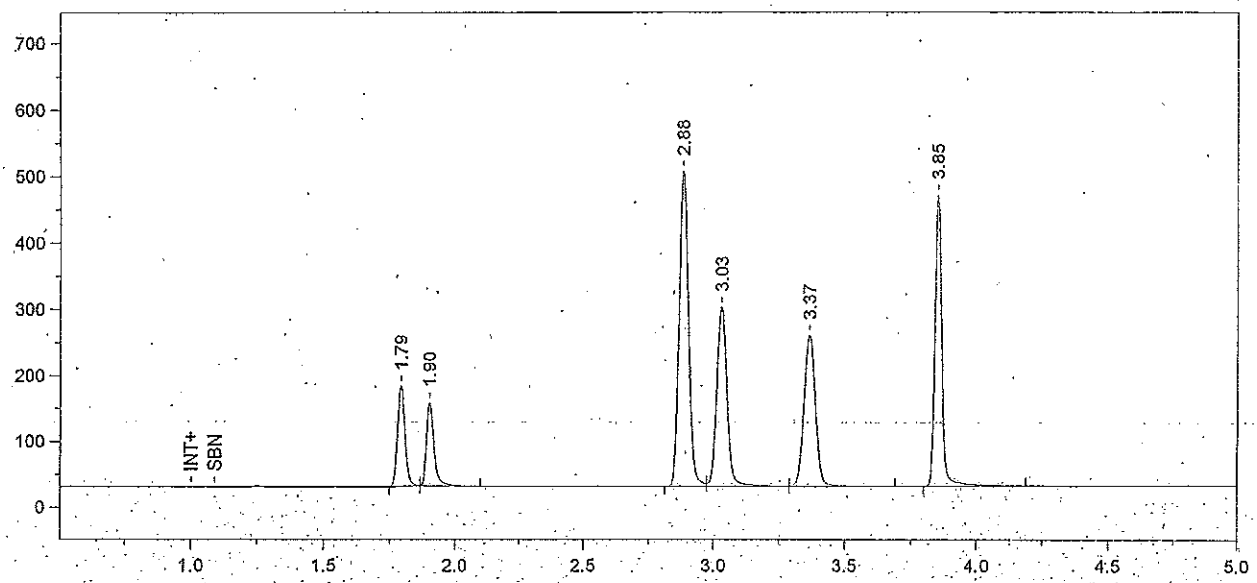
Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source	Date and time
1	0	(0)	--	0.000	0	0	Manual	4/11/2005 10:03:40 AM
2	0.0257	112540.6	4379012	-3.116	0.0257	0.1311435	C:\Alcohol Data\Sim121311\Sim121311.0003.BND	12/13/2011 10:21:39 AM
3	0.0828	366961.5	4431902	-0.196	0.0828	0.4352505	C:\Alcohol Data\Sim121311\Sim121311.0004.BND	12/13/2011 10:36:40 AM
4	0.2072	921467.8	4447239	-0.376	0.2072	1.087215	C:\Alcohol Data\Sim121311\Sim121311.0005.BND	12/13/2011 10:51:39 AM
5	0.4126	1812693	4393342	0.115	0.4126	2.175656	C:\Alcohol Data\Sim121311\Sim121311.0006.BND	12/13/2011 11:06:42 AM



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/13/2011 Today's Time = 12:32:42 PM
Bound File Name = Sim121311.0001.RAW
Sample Name = Blank
Date Taken = 12/13/2011 9:51:25 AM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 174

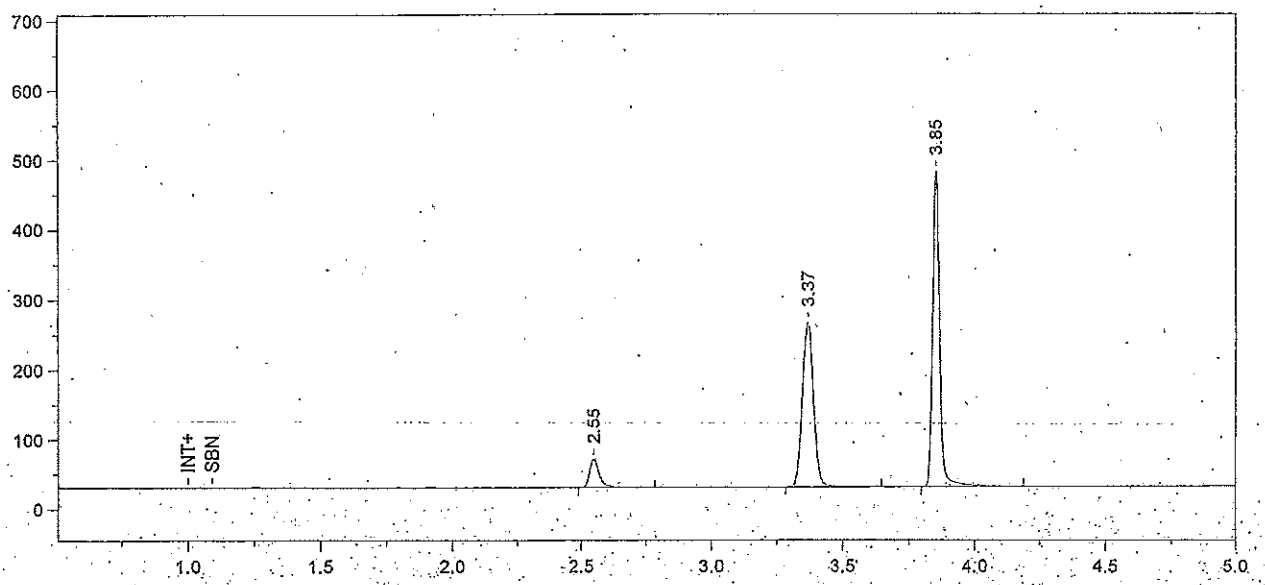
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	3.37	t-Butanol	710381	1.0053	0.8205
2	3.86	n-Propanol	863057	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/13/2011 Today's Time = 12:32:45 PM
Bound File Name = Sim121311.0002.RAW
Sample Name = TMX
Date Taken = 12/13/2011 10:06:26 AM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 174

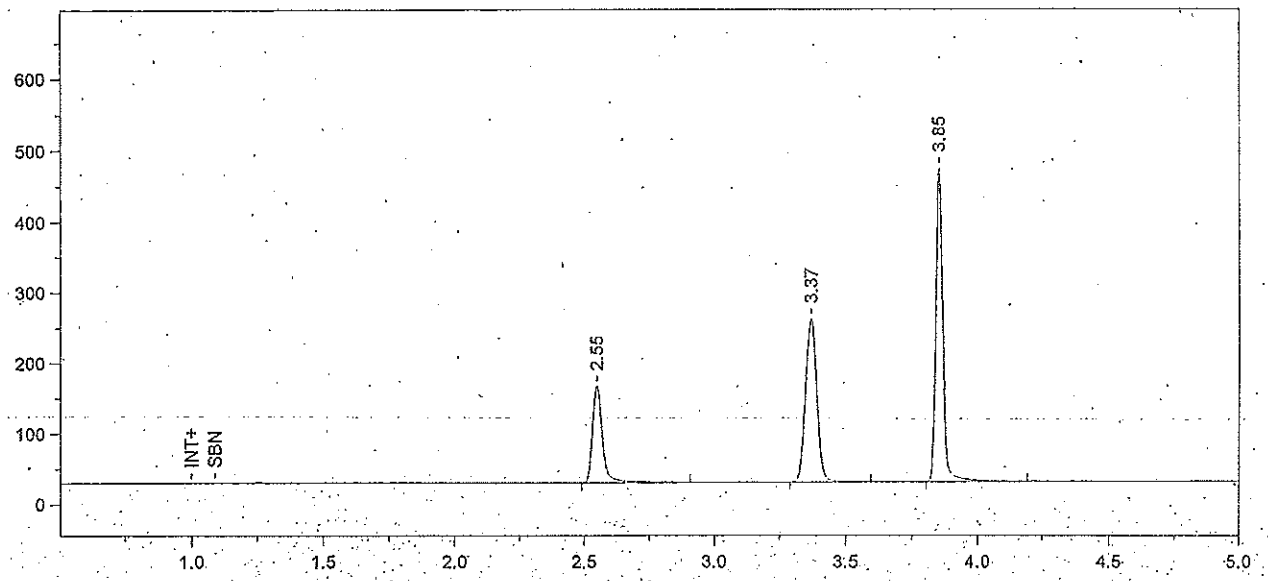
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	1.79	Acetaldehyde	304637	0.0510	0.0416
2	1.90	Methanol	258143	0.1280	0.1045
3	2.88	Acetone	1201913	0.0600	0.0490
4	3.03	Isopropanol	746558	0.0810	0.0661
5	3.37	t-Butanol	689576	1.0091	0.8236
6	3.85	n-Propanol	834609	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/13/2011 Today's Time = 12:32:48 PM
Bound File Name = Sim121311.0003.RAW
Sample Name = Std A
Date Taken = 12/13/2011 10:21:34 AM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 174

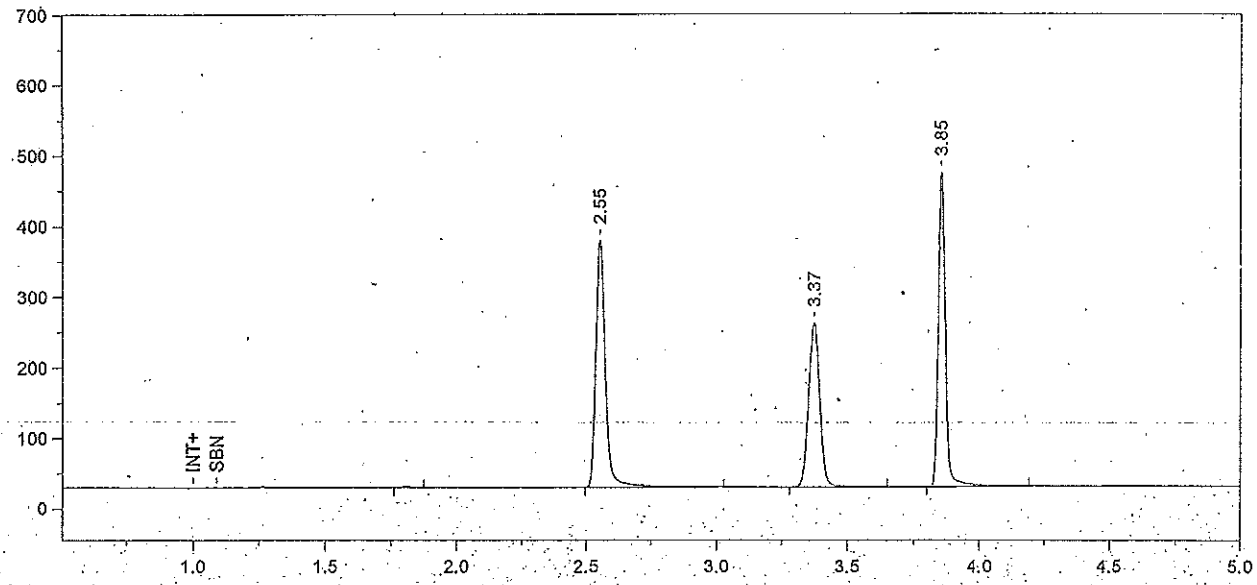
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	112541	0.0249	0.0203
2	3.37	t-Butanol	704921	1.0033	0.8189
3	3.85	n-Propanol	858148	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/13/2011 Today's Time = 12:32:52 PM
Bound File Name = Sim121311.0004.RAW
Sample Name = Std B
Date Taken = 12/13/2011 10:36:34 AM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 174

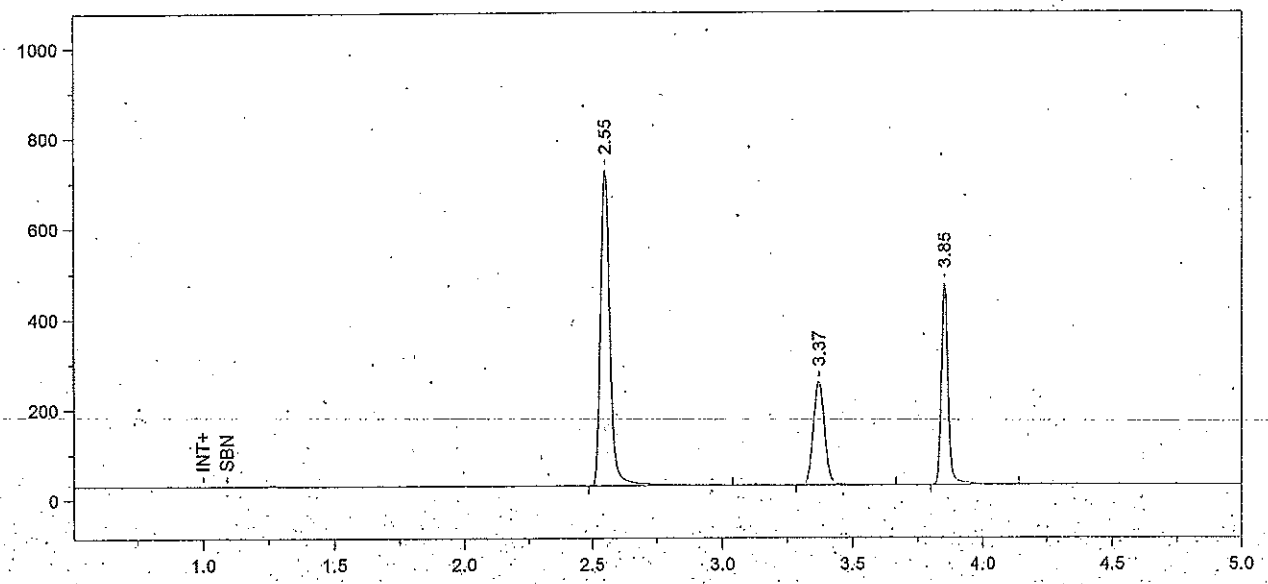
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	366962	0.0826	0.0674
2	3.37	t-Butanol	685077	0.9924	0.8100
3	3.85	n-Propanol	843104	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/13/2011 Today's Time = 12:32:55 PM
Bound File Name = Sim121311.0005.RAW
Sample Name = Std C
Date Taken = 12/13/2011 10:51:36 AM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 174

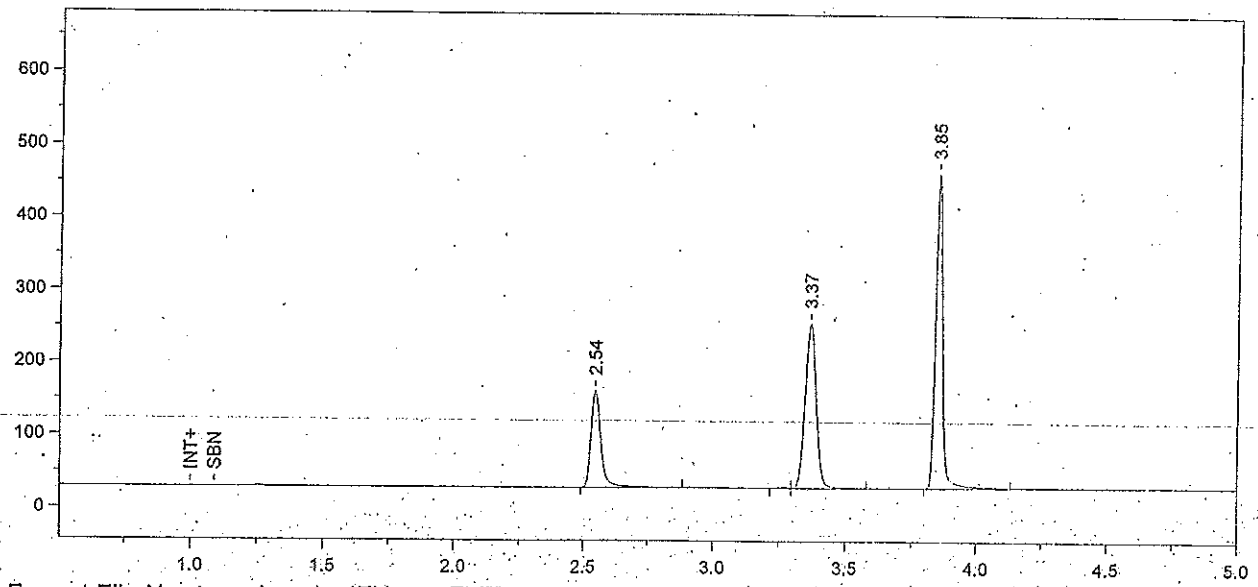
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.55	Ethanol	921468	0.2064	0.1685
3	3.37	t-Butanol	690207	0.9946	0.8118
4	3.85	n-Propanol	847549	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/13/2011 Today's Time = 12:32:58 PM
Bound File Name = Sim121311.0006.RAW
Sample Name = Std D
Date Taken = 12/13/2011 11:06:35 AM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 174

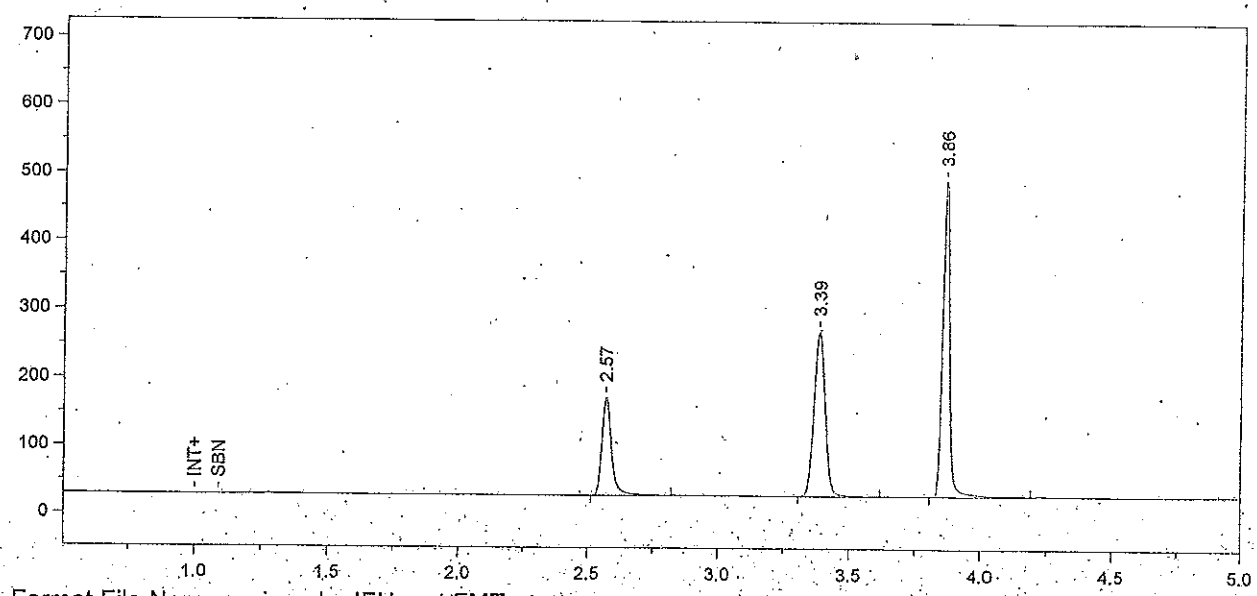
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	1812693	0.4131	0.3372
2	3.37	t-Butanol	682601	1.0006	0.8167
3	3.85	n-Propanol	833171	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/13/2011 Today's Time = 12:33:01 PM
Bound File Name = Sim121311.0007.RAW
Sample Name = Aq control 0.08
Date Taken = 12/13/2011 11:21:42 AM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 174

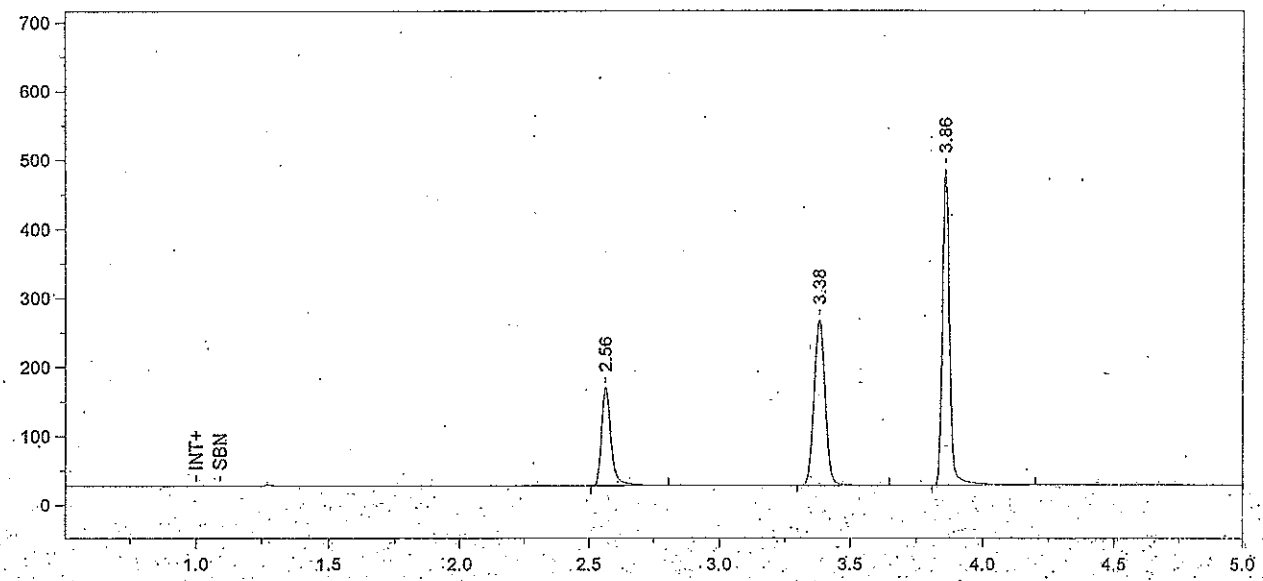
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.54	Ethanol	356565	0.0824	0.0673
3	3.37	t-Butanol	668872	0.9944	0.8116
4	3.85	n-Propanol	821515	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/13/2011
Today's Time = 8:41:02 PM
Bound File Name = Sim121311.0022.RAW
Sample Name = CCS B
Date Taken = 12/13/2011 8:40:56 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 174

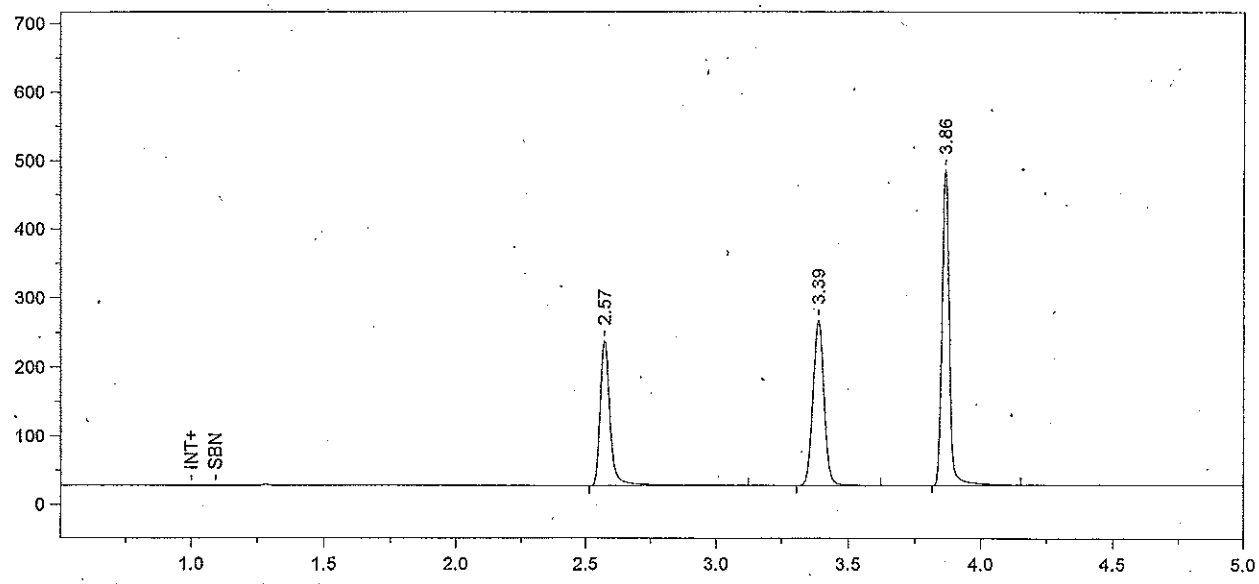
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.57	Ethanol	375562	0.0814	0.0664
2	3.39	t-Butanol	714717	0.9964	0.8132
3	3.86	n-Propanol	876082	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/13/2011 Today's Time = 8:56:03 PM
Bound File Name = Sim121311.0023.RAW
Sample Name = CCS B
Date Taken = 12/13/2011 8:55:57 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 174

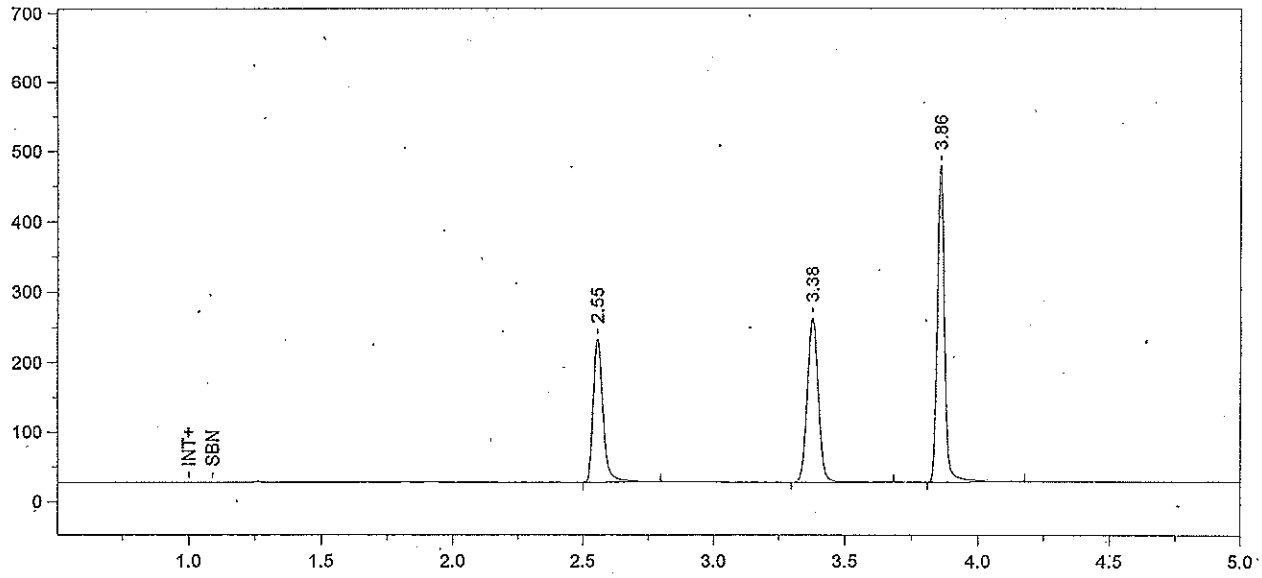
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.56	Ethanol	372798	0.0819	0.0669
2	3.38	t-Butanol	705155	0.9971	0.8138
3	3.86	n-Propanol	863746	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/13/2011 Today's Time = 9:11:02 PM
Bound File Name = Sim121311.0024.RAW
Sample Name = 0.1 Sim Sol - MCS
Date Taken = 12/13/2011 9:10:58 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 174

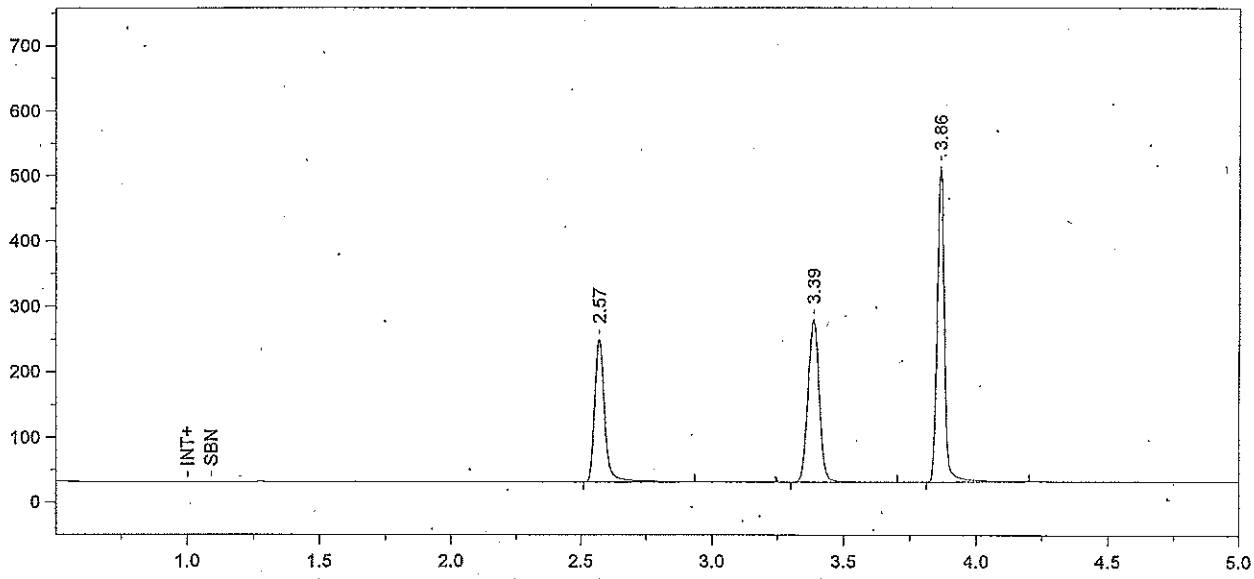
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.57	Ethanol	561197	0.1234	0.1008
2	3.39	t-Butanol	706817	1.0001	0.8163
3	3.86	n-Propanol	863174	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/13/2011 Today's Time = 9:25:59 PM
Bound File Name = Sim121311.0025.RAW
Sample Name = 0.1 Sim Sol - MCS
Date Taken = 12/13/2011 9:25:57 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 174

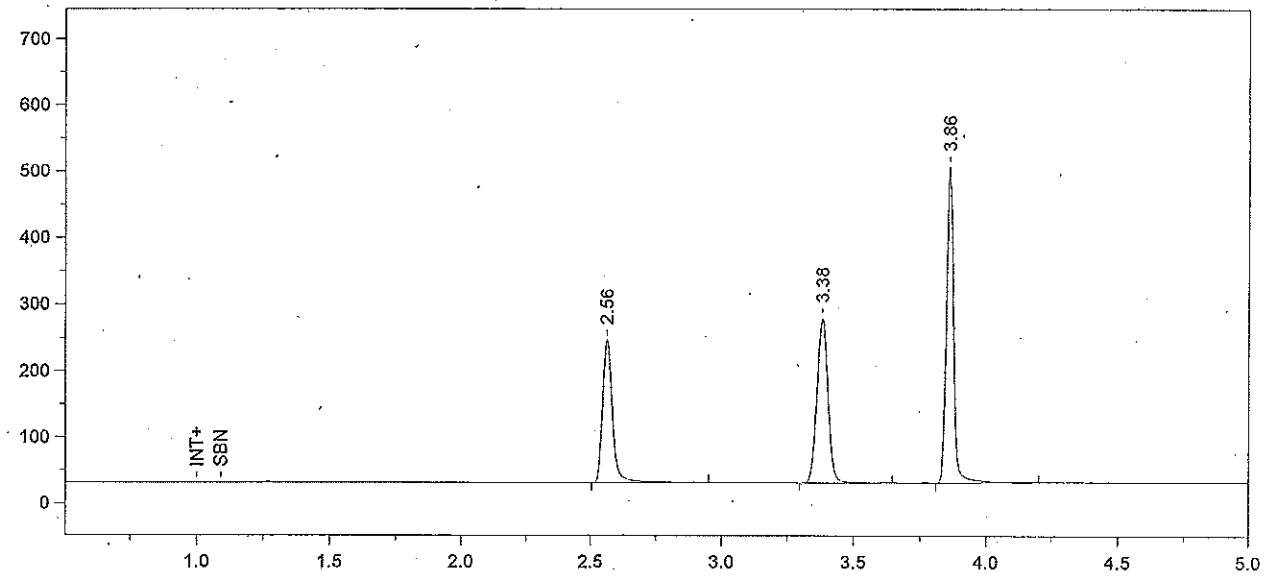
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	537012	0.1191	0.0972
2	3.38	t-Butanol	700836	0.9997	0.8159
3	3.86	n-Propanol	856252	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/13/2011
Today's Time = 9:41:10 PM
Bound File Name = Sim121311.0026.RAW
Sample Name = 0.1 Sim Sol - MCS
Date Taken = 12/13/2011 9:41:05 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 174

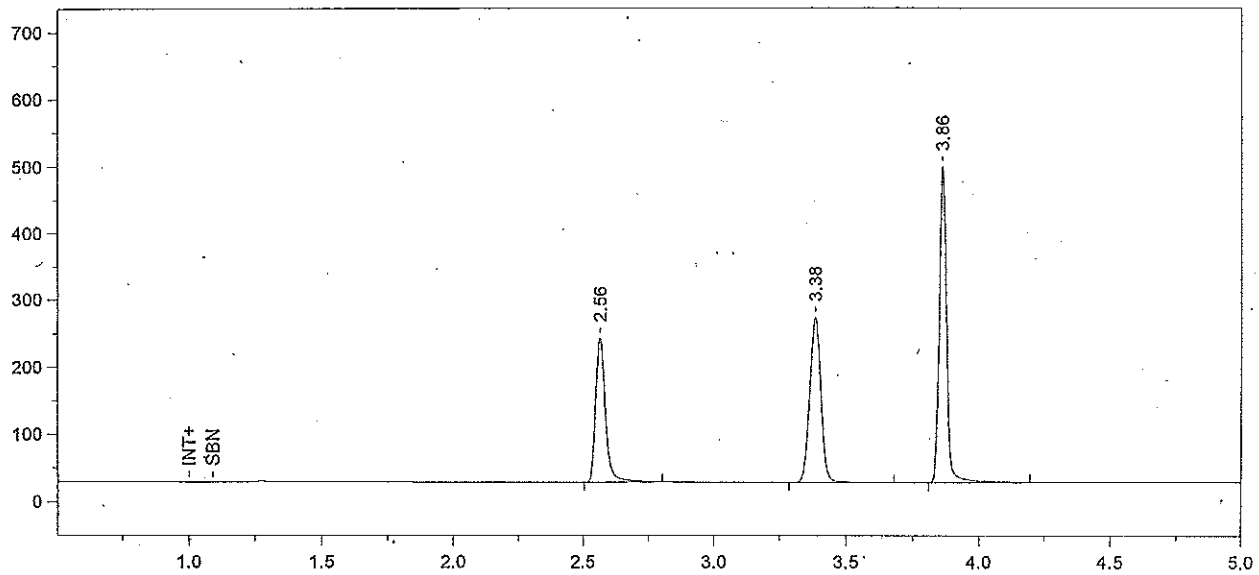
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.57	Ethanol	577631	0.1213	0.0990
2	3.39	t-Butanol	741832	1.0024	0.8181
3	3.86	n-Propanol	903878	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/13/2011 Today's Time = 9:56:07 PM
Bound File Name = Sim121311.0027.RAW
Sample Name = 0.1 Sim Sol - MCS
Date Taken = 12/13/2011 9:56:06 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 174

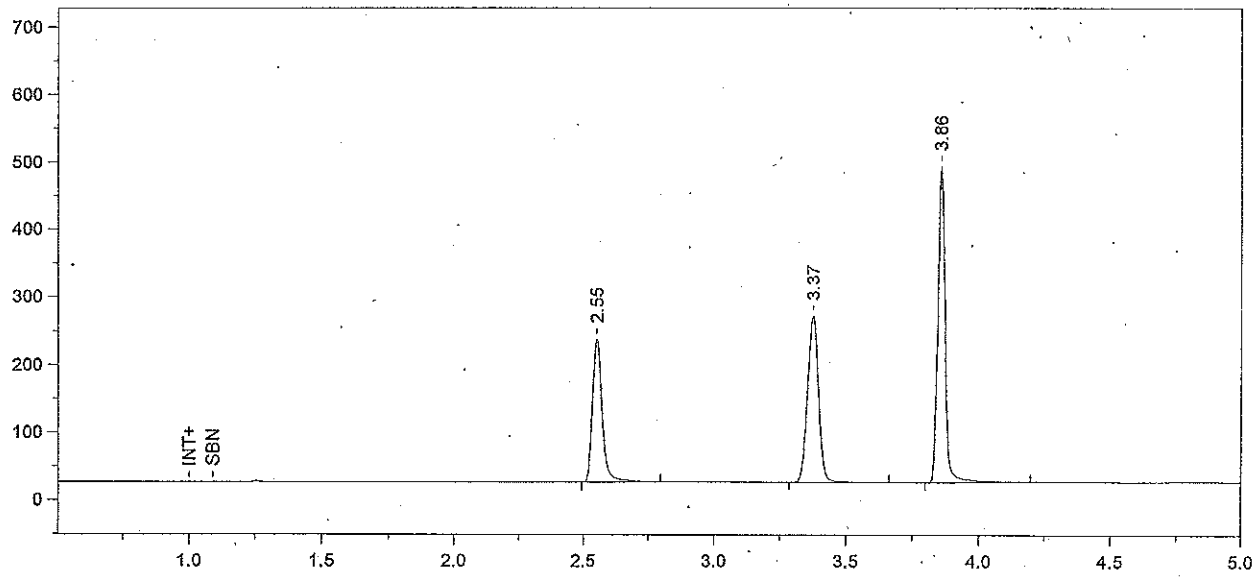
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.56	Ethanol	572176	0.1214	0.0991
2	3.38	t-Butanol	736035	1.0047	0.8200
3	3.86	n-Propanol	894729	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/13/2011 Today's Time = 10:11:04 PM
Bound File Name = Sim121311.0028.RAW
Sample Name = 0.1 Sim Sol - MCS
Date Taken = 12/13/2011 10:11:01 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 174

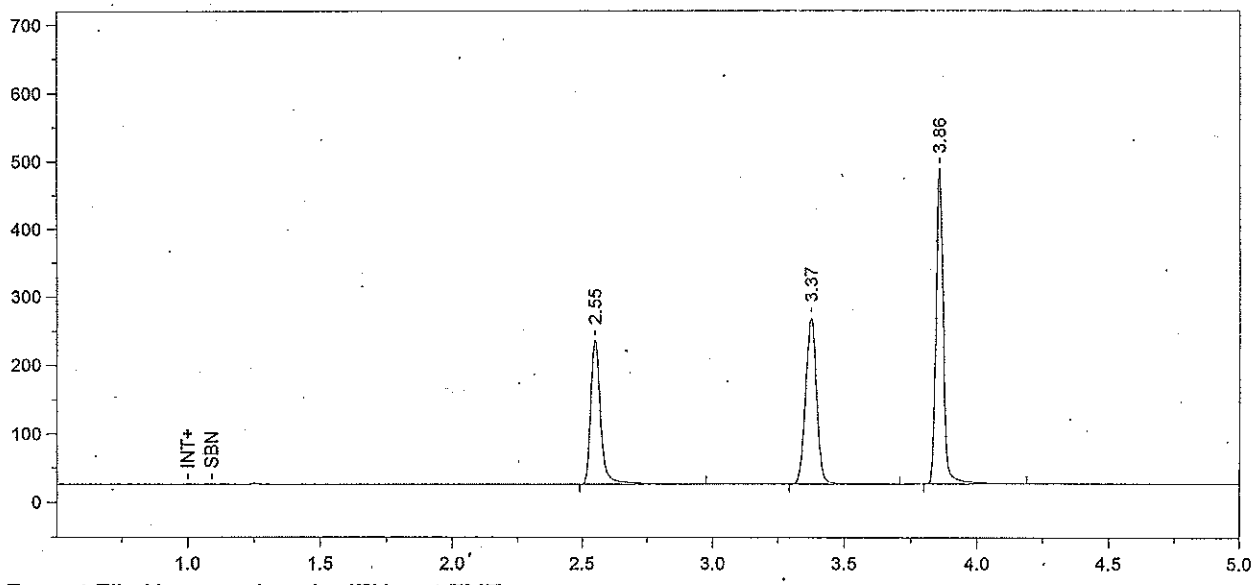
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.56	Ethanol	559824	0.1196	0.0976
2	3.38	t-Butanol	730001	1.0034	0.8190
3	3.86	n-Propanol	888556	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/13/2011 Today's Time = 10:26:04 PM
Bound File Name = Sim121311.0029.RAW
Sample Name = 0.1 Sim Sol - MCS
Date Taken = 12/13/2011 10:26:02 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 174

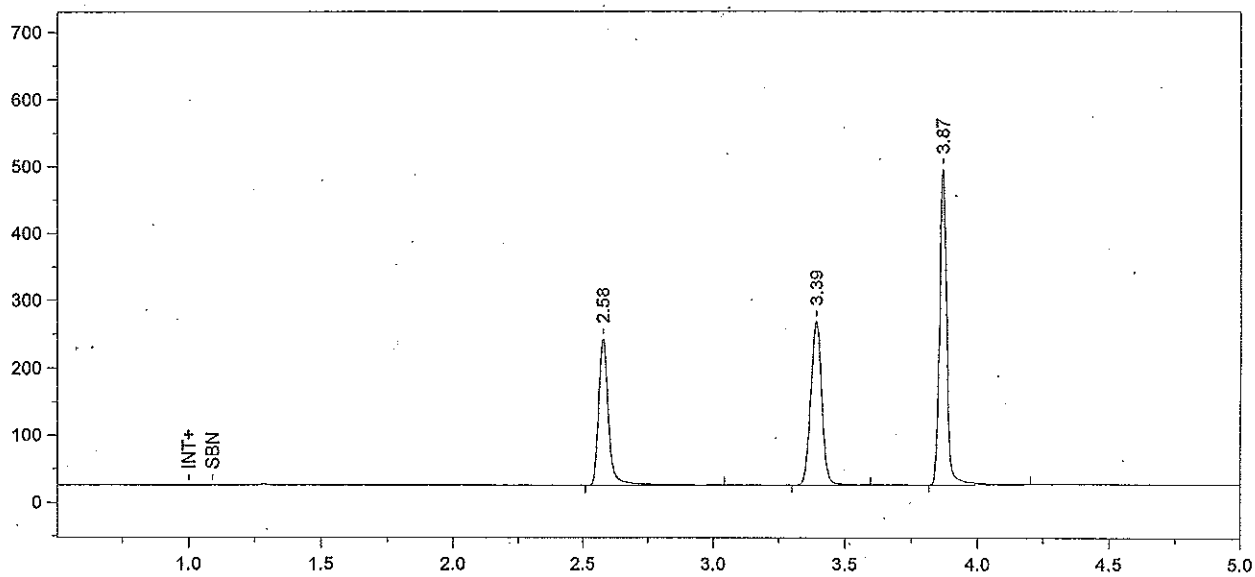
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	554444	0.1192	0.0973
2	3.37	t-Butanol	729443	1.0088	0.8234
3	3.86	n-Propanol	883093	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/13/2011 Today's Time = 10:41:09 PM
Bound File Name = Sim121311.0030.RAW
Sample Name = 0.1 Sim Sol - MCS
Date Taken = 12/13/2011 10:41:03 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 174

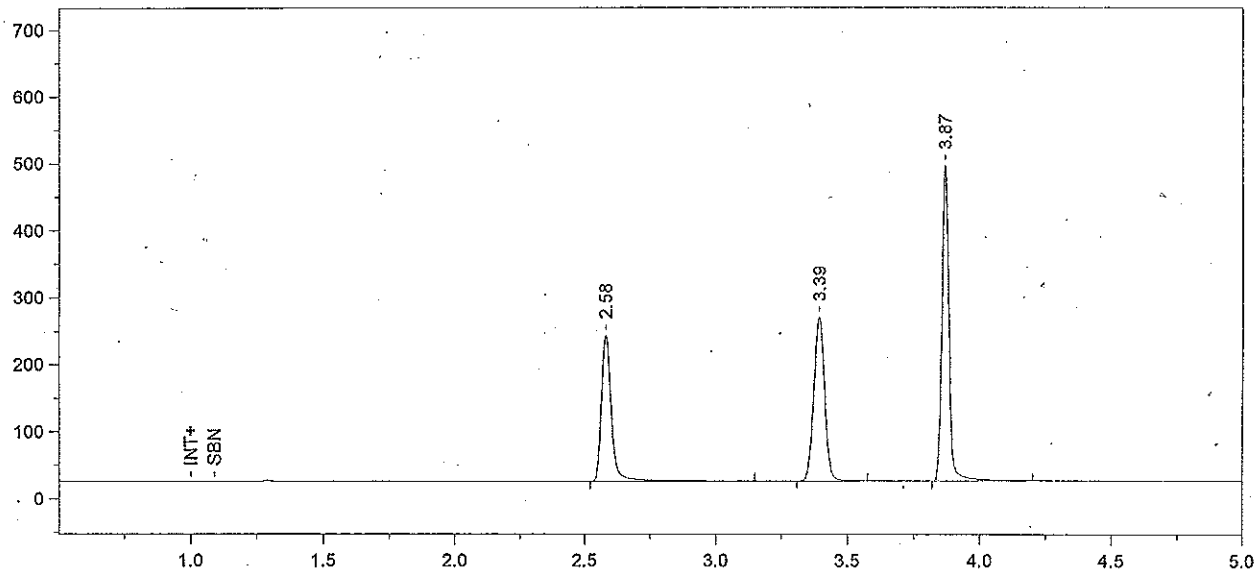
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	565429	0.1224	0.0999
2	3.37	t-Butanol	720067	1.0030	0.8186
3	3.86	n-Propanol	876841	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/13/2011
Today's Time = 10:56:12 PM
Bound File Name = Sim121311.0031.RAW
Sample Name = 0.1 Sim Sol - JFH
Date Taken = 12/13/2011 10:56:05 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 174

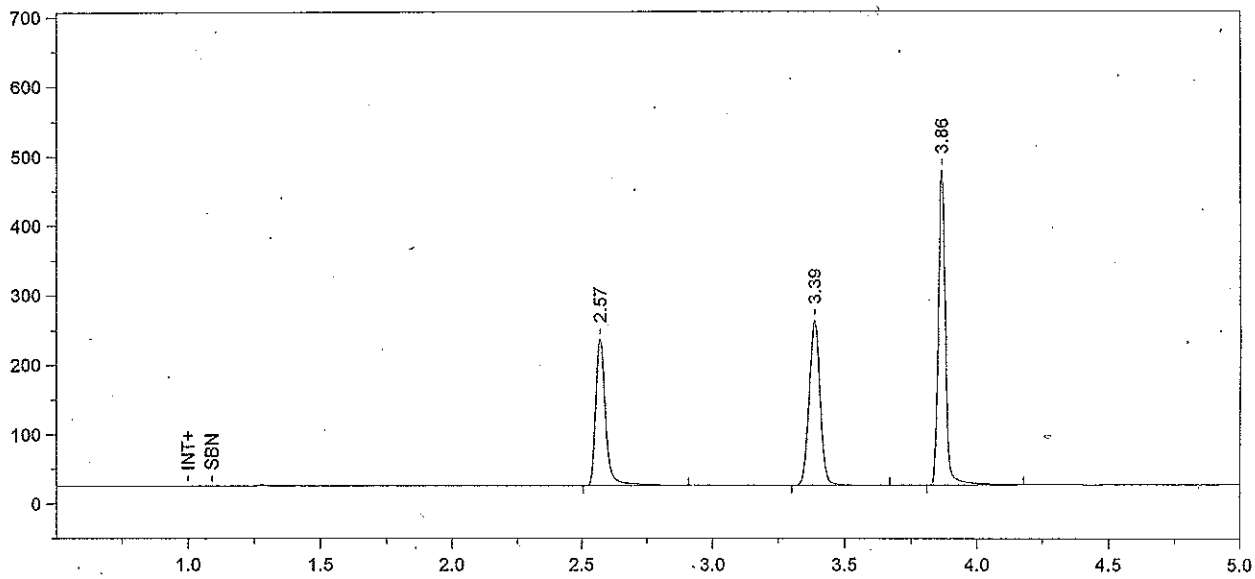
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.58	Ethanol	573674	0.1241	0.1013
2	3.39	t-Butanol	715609	0.9960	0.8130
3	3.87	n-Propanol	877485	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/13/2011 Today's Time = 11:11:11 PM
Bound File Name = Sim121311.0032.RAW
Sample Name = 0.1 Sim Sol - JFH
Date Taken = 12/13/2011 11:11:08 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 174

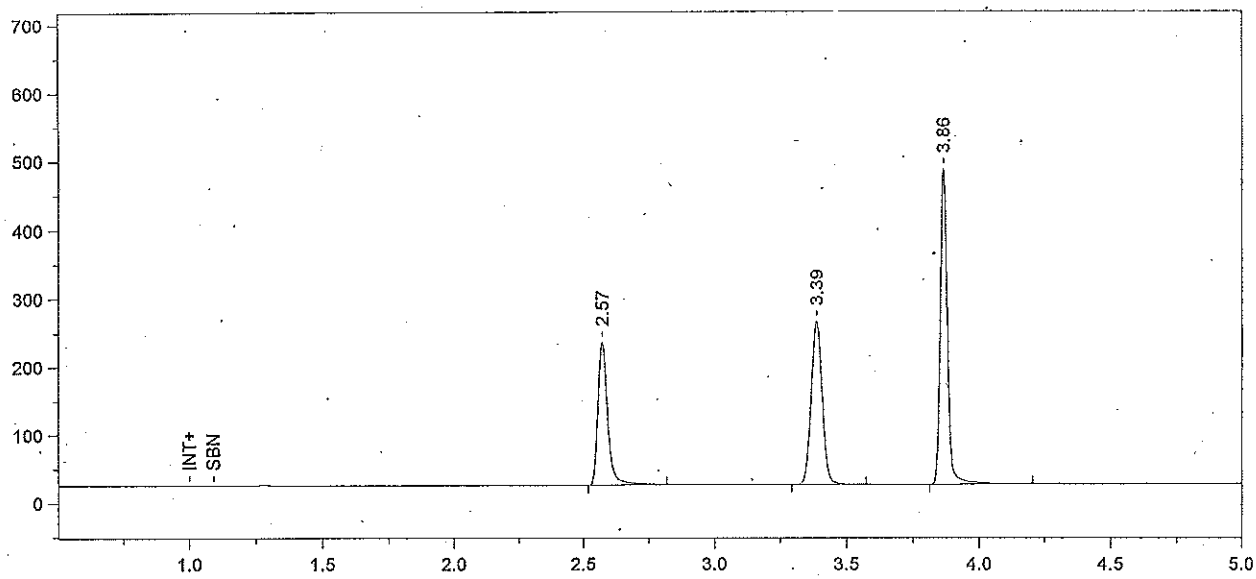
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.58	Ethanol	577566	0.1243	0.1015
2	3.39	t-Butanol	716682	0.9922	0.8099
3	3.87	n-Propanol	882166	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/13/2011 Today's Time = 11:26:12 PM
Bound File Name = Sim121311.0033.RAW
Sample Name = 0.1 Sim Sol - JFH
Date Taken = 12/13/2011 11:26:10 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 174

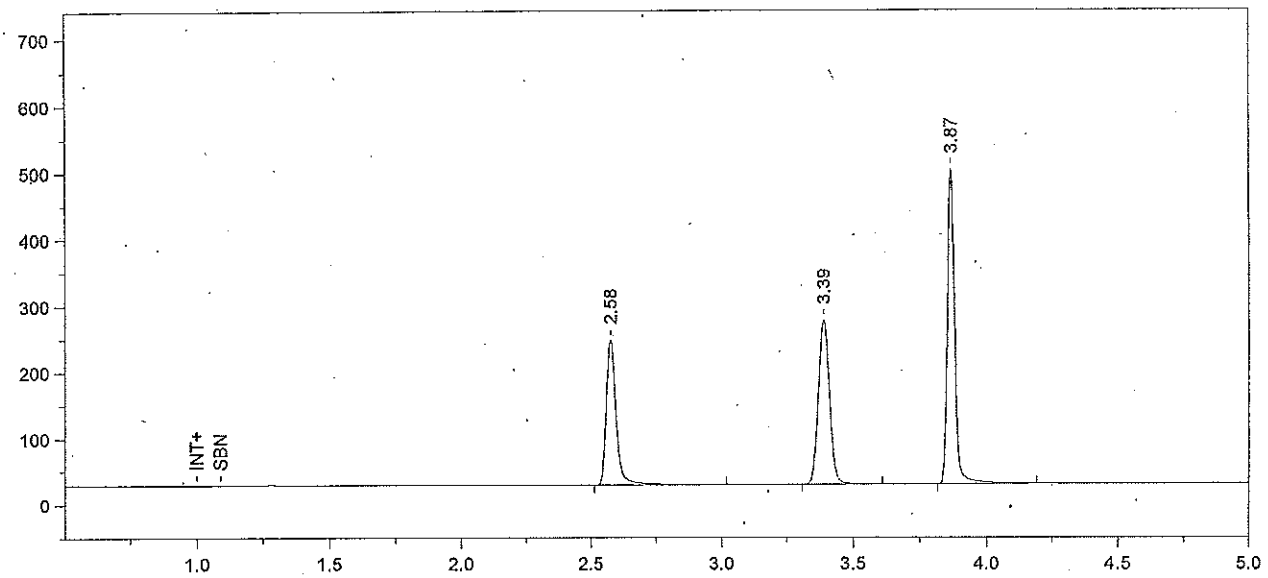
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.57	Ethanol	555546	0.1239	0.1012
2	3.39	t-Butanol	699911	1.0045	0.8198
3	3.86	n-Propanol	851039	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/13/2011 Today's Time = 11:41:17 PM
Bound File Name = Sim121311.0034.RAW
Sample Name = 0.1 Sim Sol - JFH
Date Taken = 12/13/2011 11:41:11 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 174

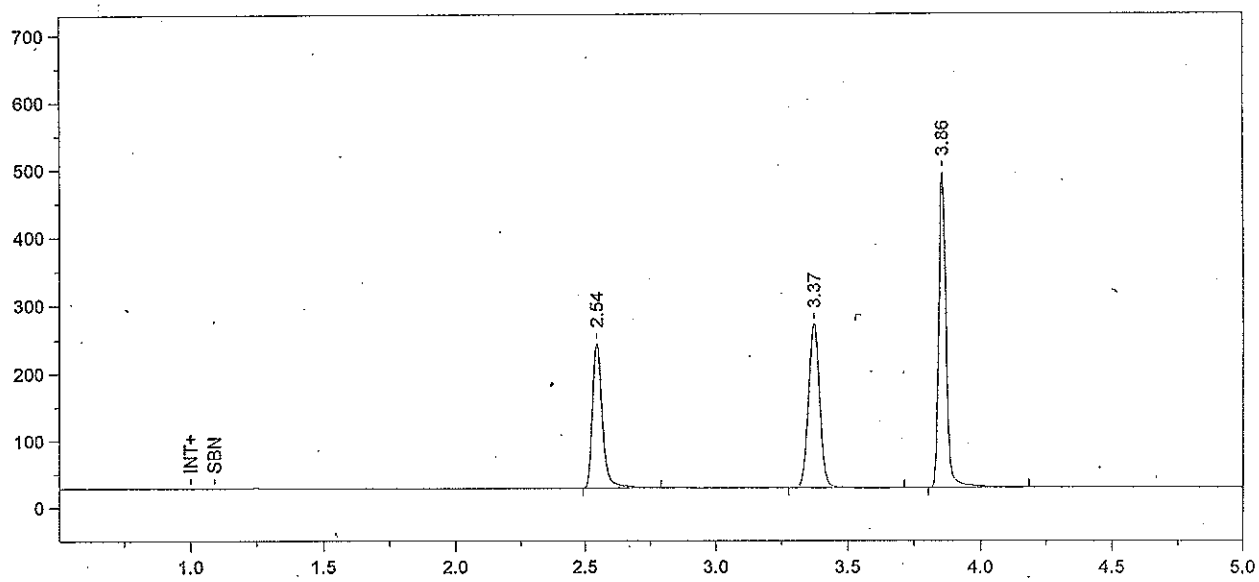
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.57	Ethanol	546301	0.1201	0.0980
2	3.39	t-Butanol	704268	0.9959	0.8128
3	3.86	n-Propanol	863700	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/13/2011 Today's Time = 11:56:16 PM
Bound File Name = Sim121311.0035.RAW
Sample Name = 0.1 Sim Sol - JFH
Date Taken = 12/13/2011 11:56:12 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 174

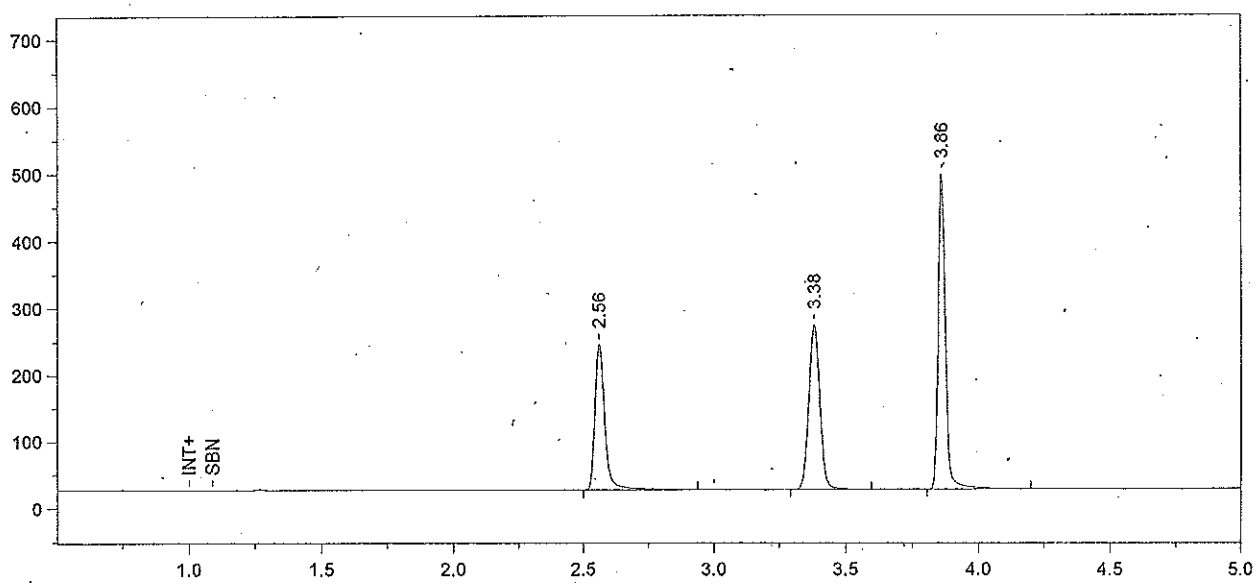
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.58	Ethanol	579799	0.1236	0.1009
2	3.39	t-Butanol	728269	0.9986	0.8151
3	3.87	n-Propanol	890707	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011 Today's Time = 12:11:15 AM
Bound File Name = Sim121311.0036.RAW
Sample Name = 0.1 Sim Sol - JFH
Date Taken = 12/14/2011 12:11:14 AM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 174

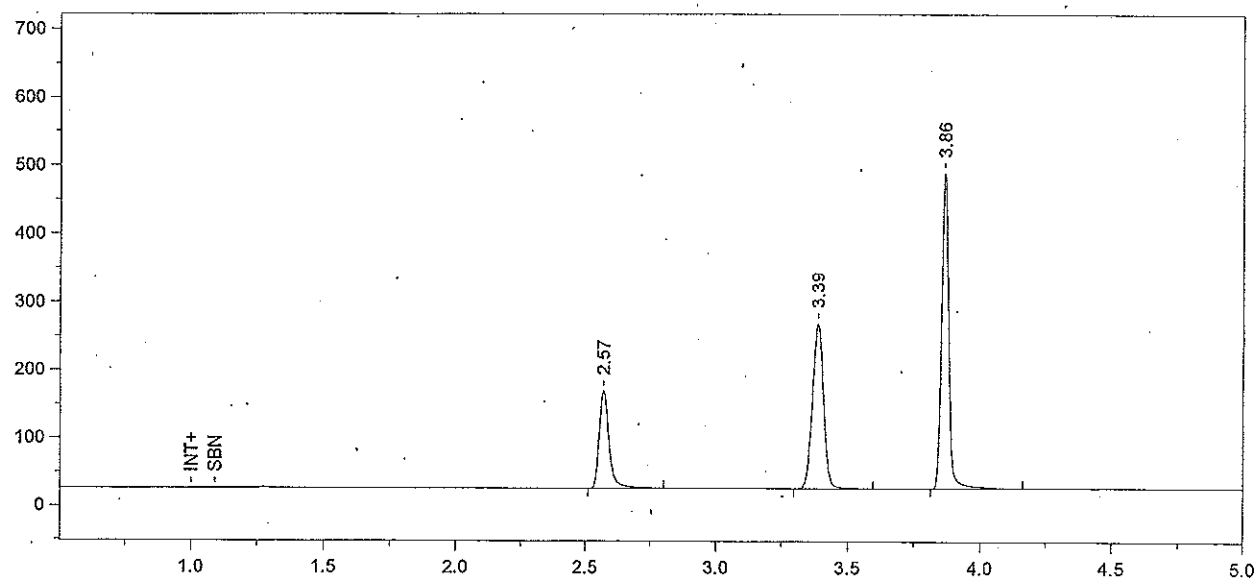
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.54	Ethanol	568987	0.1217	0.0994
2	3.37	t-Butanol	729939	1.0046	0.8199
3	3.86	n-Propanol	887433	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011
Today's Time = 12:26:14 AM
Bound File Name = Sim121311.0037.RAW
Sample Name = 0.1 Sim Sol - JFH
Date Taken = 12/14/2011 12:26:13 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 174

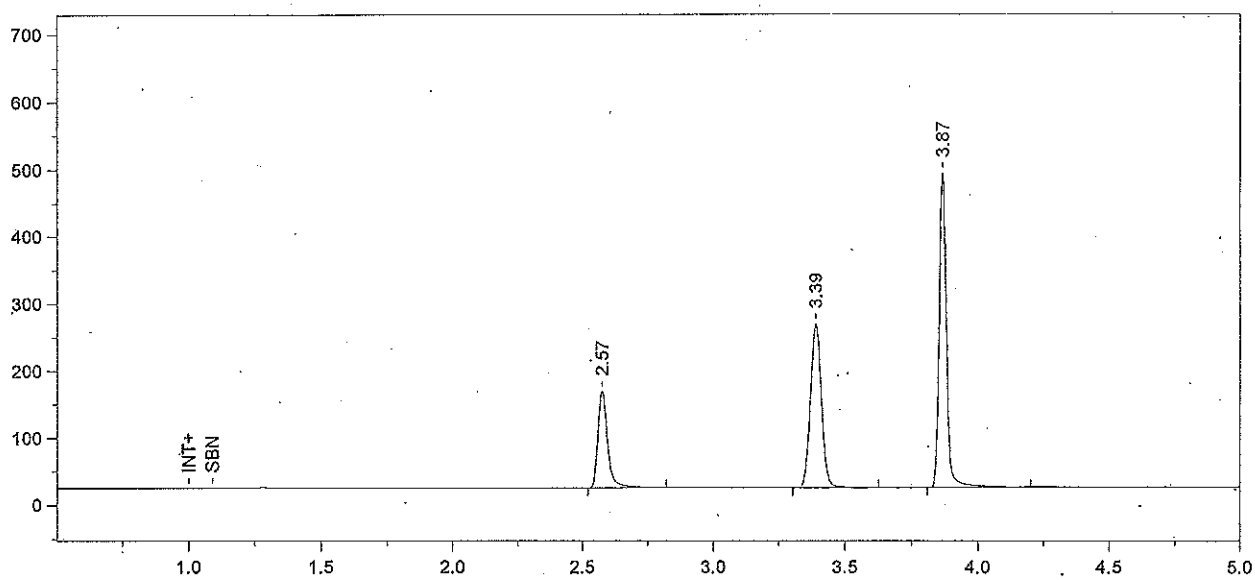
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.56	Ethanol	582272	0.1241	0.1013
2	3.38	t-Butanol	730464	1.0012	0.8172
3	3.86	n-Propanol	891085	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011
Today's Time = 12:41:27 AM
Bound File Name = Sim121311.0038.RAW
Sample Name = CCS B
Date Taken = 12/14/2011 12:41:21 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 174

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.57	Ethanol	378191	0.0822	0.0671
2	3.39	t-Butanol	716741	1.0017	0.8176
3	3.86	n-Propanol	873882	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011 Today's Time = 12:56:28 AM
Bound File Name = Sim121311.0039.RAW
Sample Name = CCS B
Date Taken = 12/14/2011 12:56:22 AM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 174

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.57	Ethanol	377476	0.0819	0.0668
2	3.39	t-Butanol	718568	1.0029	0.8186
3	3.87	n-Propanol	875079	1.0000	0.8162

File Name: C:\Methods\SimSolution.cal
Version: 181

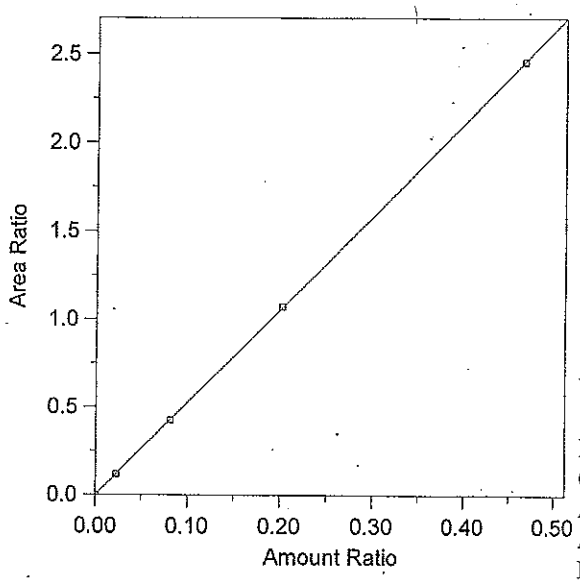
Creator:
Description:
Reason for change:

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:	2.546 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

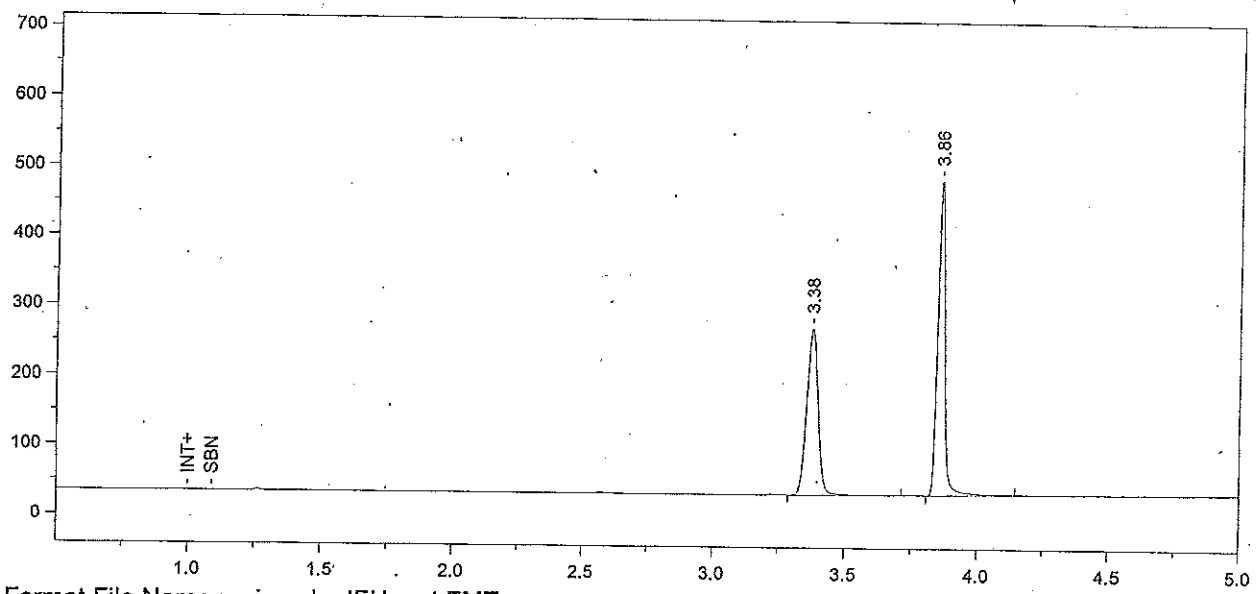
Single peak quantification by area

Y = 5.277478 X + 0

Linear fit with equal weighting, forced to origin

Coefficient of determination:	0.9999885
Average error:	0.428%
Average CF:	4.22602
RSD:	55.907%

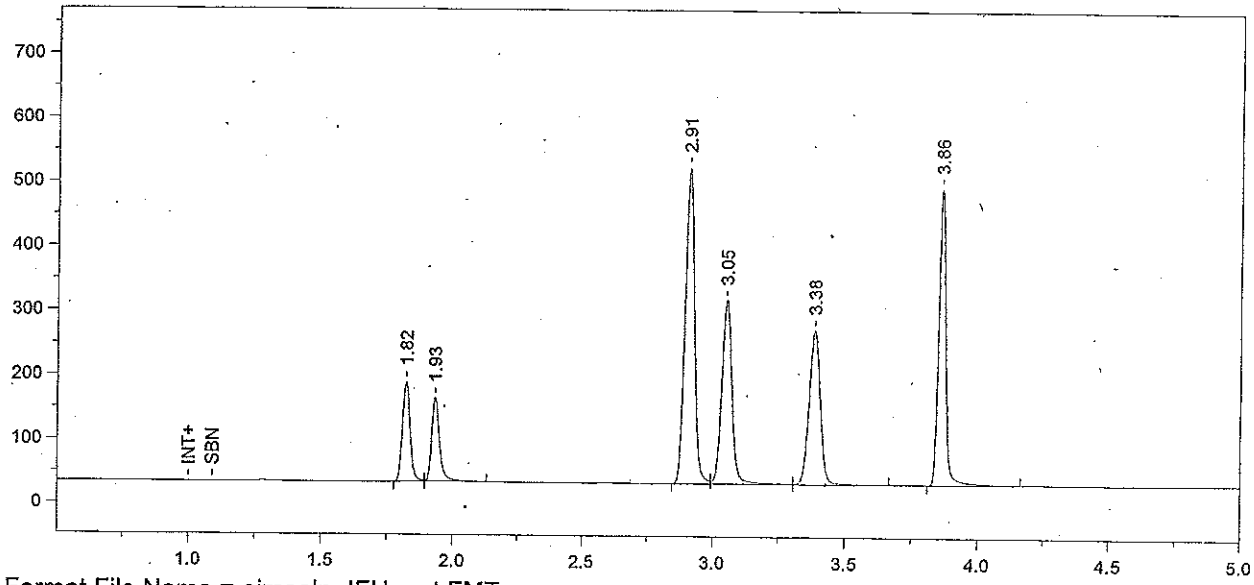
Level	Amount	Response	Cal Factor	Error, %	Amount Ratio	Response Ratio	Source	Date and time
1	0	(0)	--	0.000	0	0	Manual	4/11/2005 10:03:40 AM
2	0.0223	102190.6	4582539	0.741	0.0223	0.11856	C:\Alcohol Data\Sim121411\Sim121411.0003.BND	12/14/2011 11:15:36 AM
3	0.0814	363828.7	4469640	-0.804	0.0814	0.4261318	C:\Alcohol Data\Sim121411\Sim121411.0004.BND	12/14/2011 11:30:35 AM
4	0.2016	902226.1	4475328	0.520	0.2016	1.069473	C:\Alcohol Data\Sim121411\Sim121411.0005.BND	12/14/2011 11:45:36 AM
5	0.466	2088203	4481123	-0.074	0.466	2.457473	C:\Alcohol Data\Sim121411\Sim121411.0006.BND	12/14/2011 11:55:41 AM



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011
Today's Time = 11:57:24 AM
Bound File Name = Sim121411.0001.RAW
Sample Name = Blank
Date Taken = 12/14/2011 10:45:28 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 181

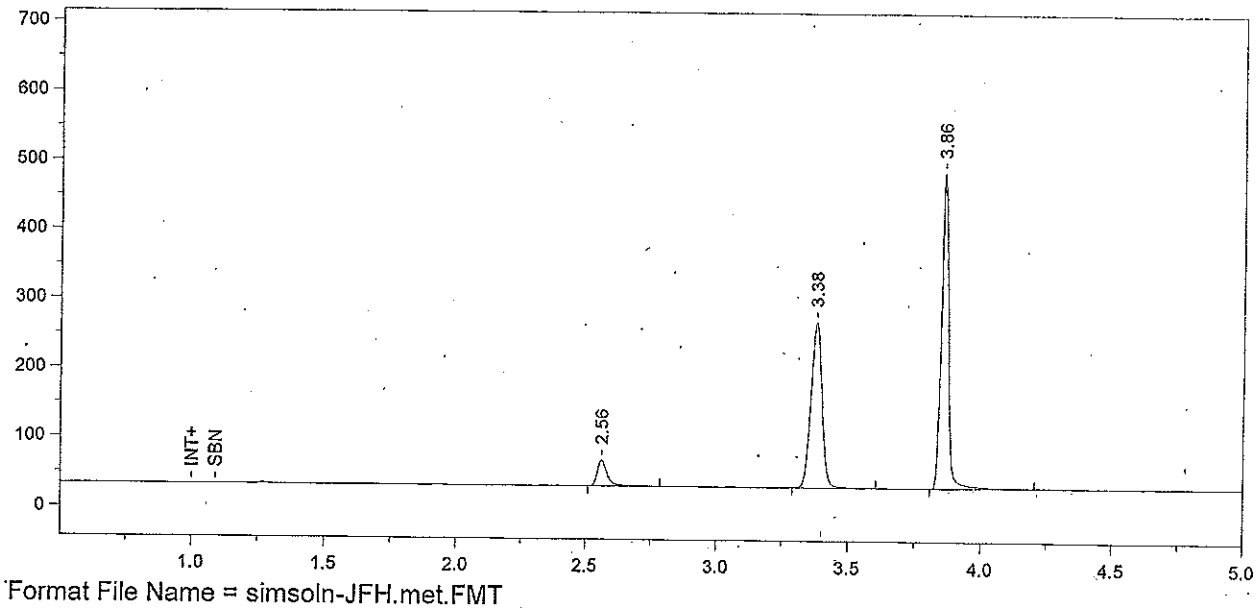
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	3.38	t-Butanol	711155	1.0143	0.8278
2	3.86	n-Propanol	858570	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011
Today's Time = 11:57:27 AM
Bound File Name = Sim121411.0002.RAW
Sample Name = TMX
Date Taken = 12/14/2011 11:00:29 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 181

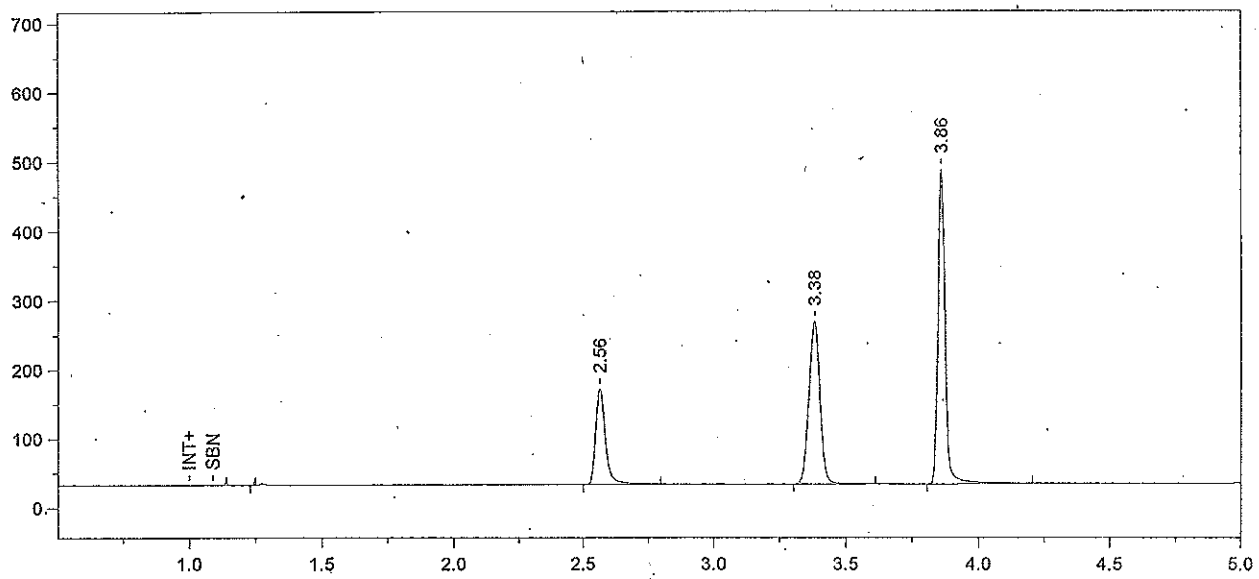
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	1.82	Acetaldehyde	312385	0.0510	0.0416
2	1.93	Methanol	266800	0.1280	0.1045
3	2.91	Acetone	1224541	0.0600	0.0490
4	3.05	Isopropanol	774875	0.0810	0.0661
5	3.38	t-Butanol	712735	1.0102	0.8245
6	3.86	n-Propanol	863931	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011
Today's Time = 11:57:31 AM
Bound File Name = Sim121411.0003.RAW
Sample Name = Std A
Date Taken = 12/14/2011 11:15:31 AM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 181

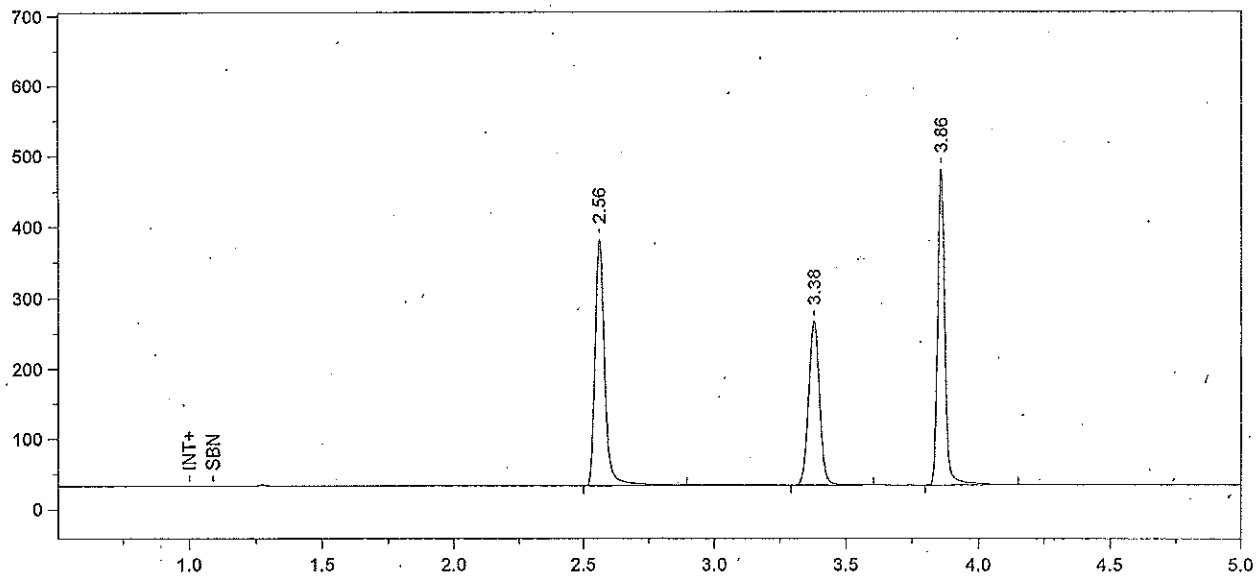
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.56	Ethanol	102191	0.0225	0.0183
2	3.38	t-Butanol	704573	1.0010	0.8170
3	3.86	n-Propanol	861931	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011 Today's Time = 11:57:35 AM
Bound File Name = Sim121411.0004.RAW
Sample Name = Std B
Date Taken = 12/14/2011 11:30:31 AM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 181

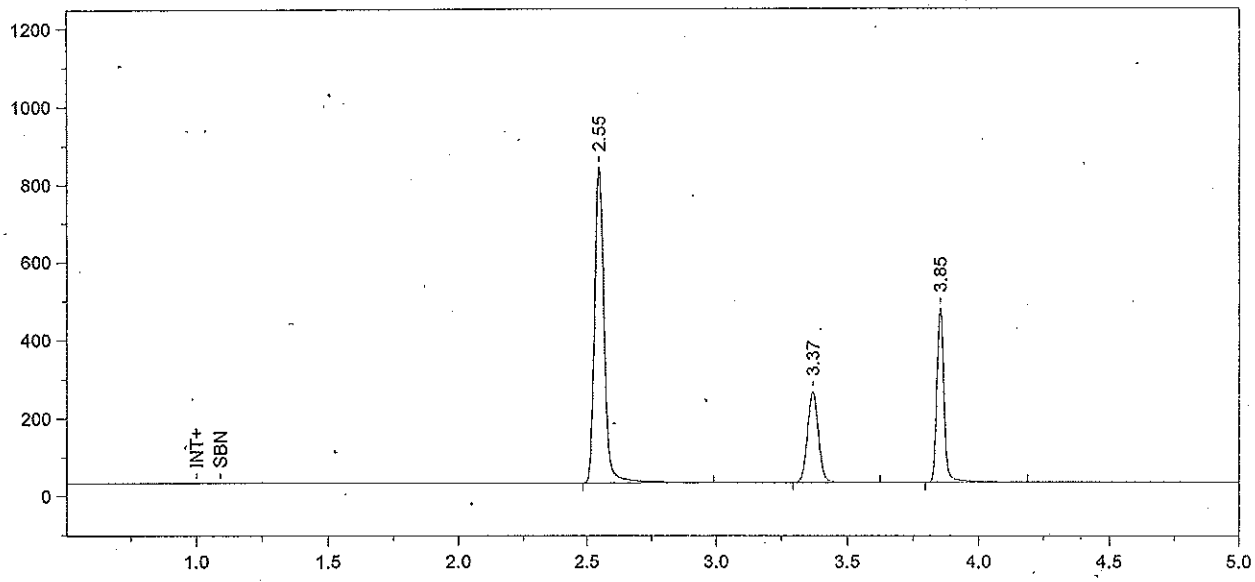
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.56	Ethanol	363829	0.0807	0.0659
3	3.38	t-Butanol	695272	0.9972	0.8139
4	3.86	n-Propanol	853794	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011 Today's Time = 11:57:38 AM
Bound File Name = Sim121411.0005.RAW
Sample Name = Std C
Date Taken = 12/14/2011 11:45:33 AM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 181

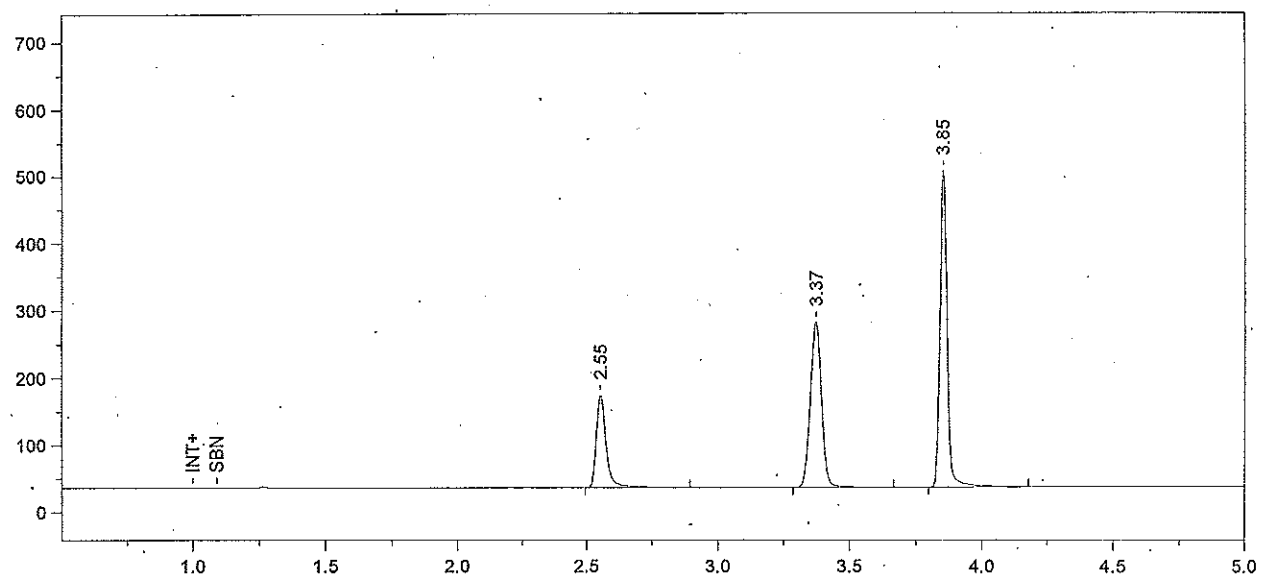
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.56	Ethanol	902226	0.2026	0.1654
2	3.38	t-Butanol	688622	0.9995	0.8158
3	3.86	n-Propanol	843617	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011 Today's Time = 11:57:42 AM
Bound File Name = Sim121411.0006.RAW
Sample Name = Std D
Date Taken = 12/14/2011 11:55:36 AM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 181

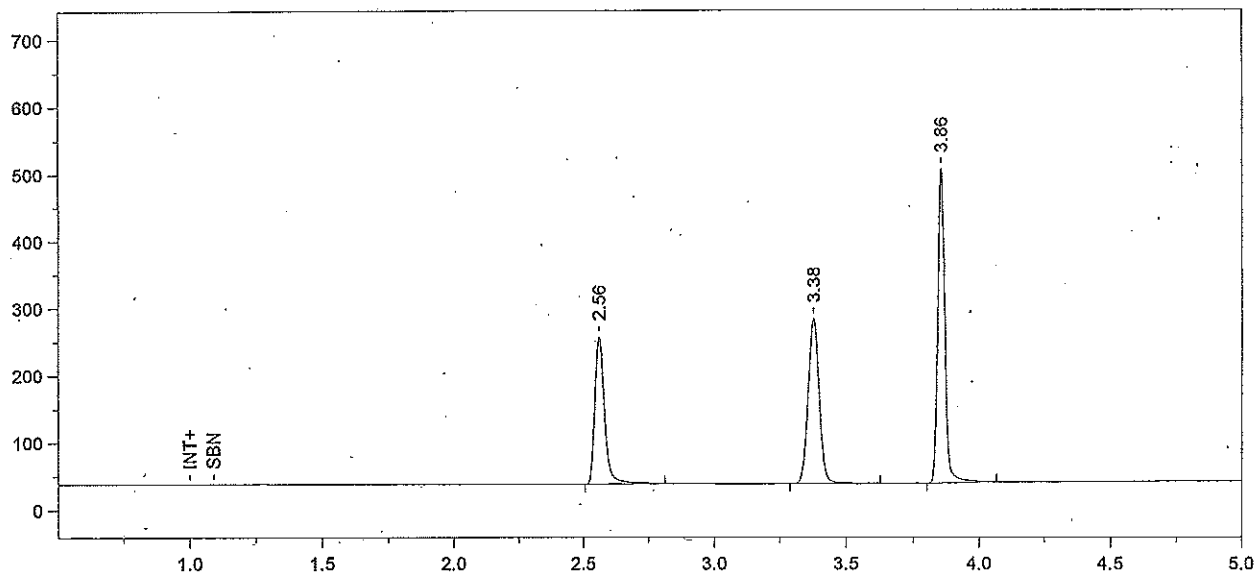
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	2088203	0.4657	0.3801
2	3.37	t-Butanol	688472	0.9921	0.8098
3	3.85	n-Propanol	849736	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011 Today's Time = 12:08:46 PM
Bound File Name = Sim121411.0007.RAW
Sample Name = AQ Std 0.08
Date Taken = 12/14/2011 12:08:44 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 181

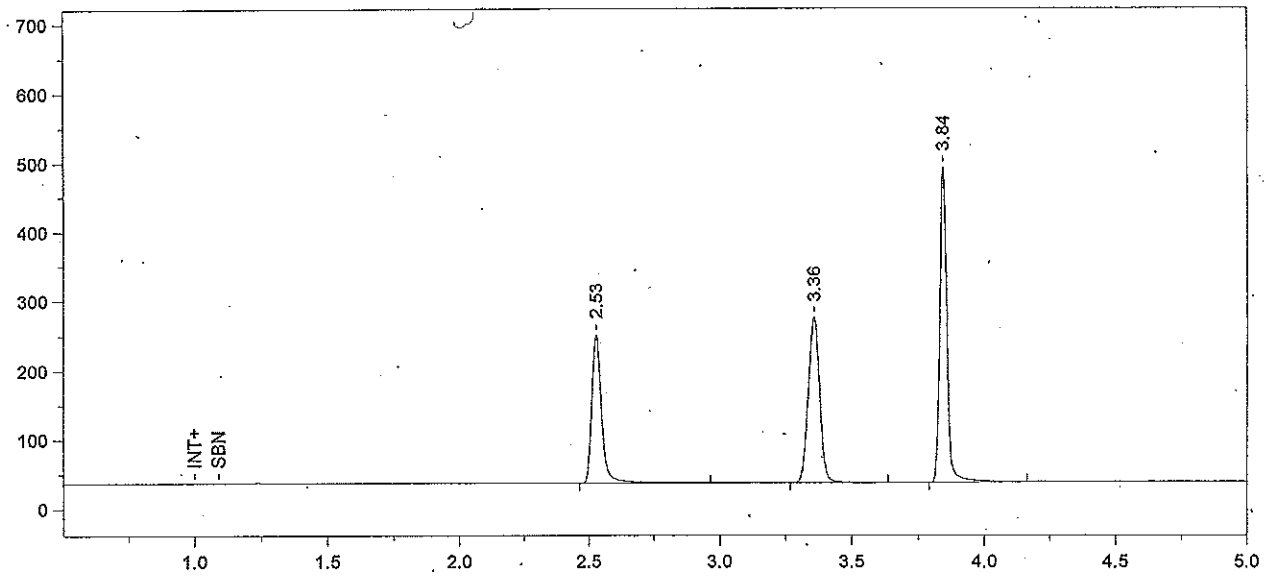
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	367755	0.0791	0.0646
2	3.37	t-Butanol	725071	1.0080	0.8227
3	3.85	n-Propanol	880822	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011
Today's Time = 3:41:18 PM
Bound File Name = Sim121411.0008.RAW
Sample Name = 0.1 MCS
Date Taken = 12/14/2011 3:41:12 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 181

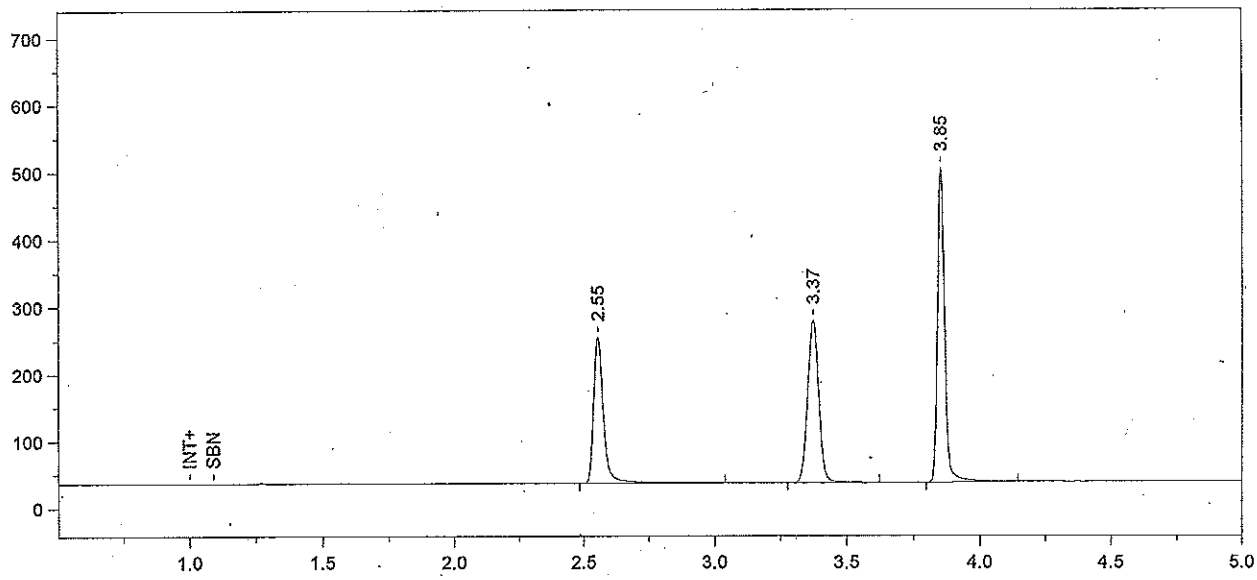
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.56	Ethanol	569238	0.1239	0.1011
2	3.38	t-Butanol	720224	1.0129	0.8267
3	3.86	n-Propanol	870722	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011 Today's Time = 3:56:09 PM
Bound File Name = Sim121411.0009.RAW
Sample Name = 0.1 MCS
Date Taken = 12/14/2011 3:56:07 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 181

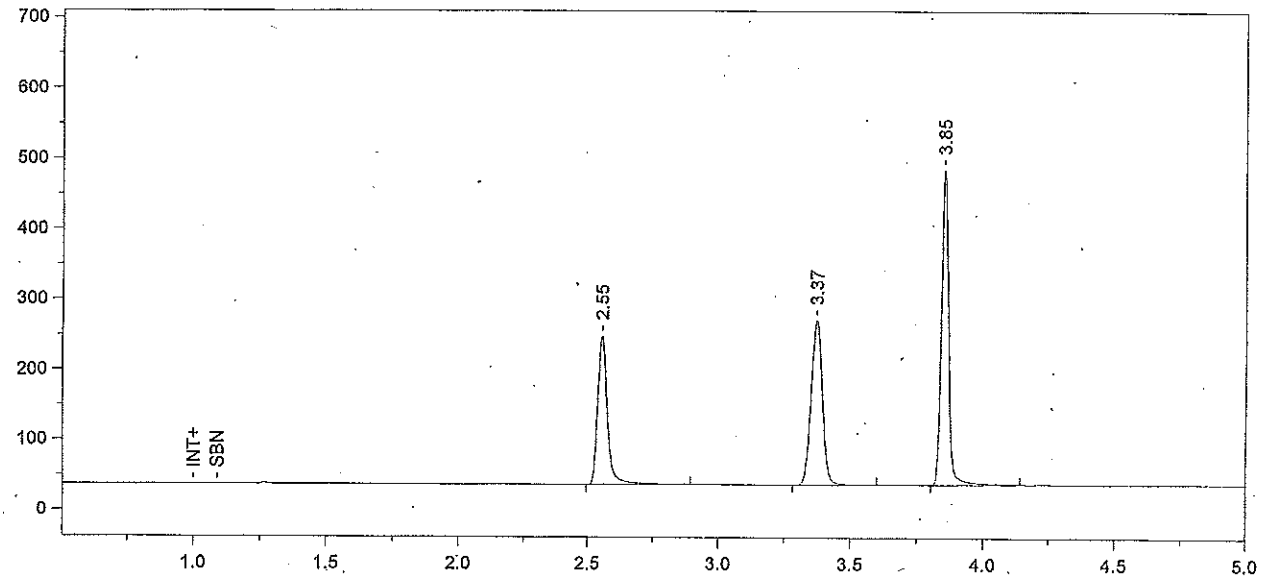
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.53	Ethanol	568374	0.1245	0.1016
2	3.36	t-Butanol	710000	1.0051	0.8203
3	3.84	n-Propanol	865011	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011
Today's Time = 4:11:20 PM
Bound File Name = Sim121411.0010.RAW
Sample Name = 0.1 MCS
Date Taken = 12/14/2011 4:11:14 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 181

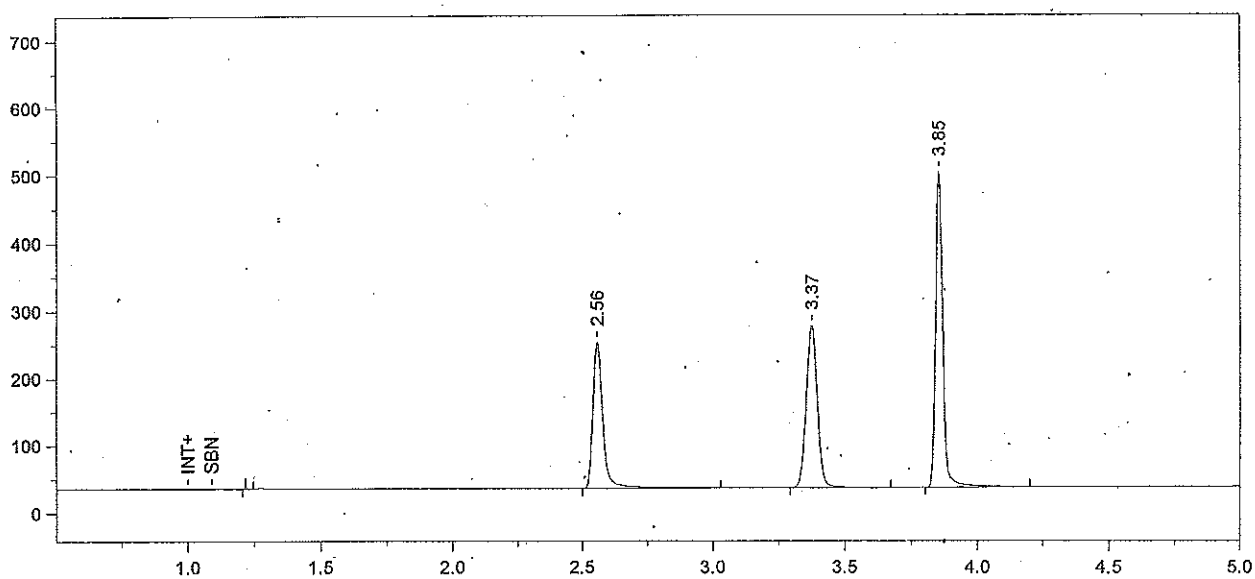
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	579243	0.1255	0.1024
2	3.37	t-Butanol	714414	1.0001	0.8163
3	3.85	n-Propanol	874691	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011
Today's Time = 4:26:19 PM
Bound File Name = Sim121411.0011.RAW
Sample Name = 0.1 MCS
Date Taken = 12/14/2011 4:26:15 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 181

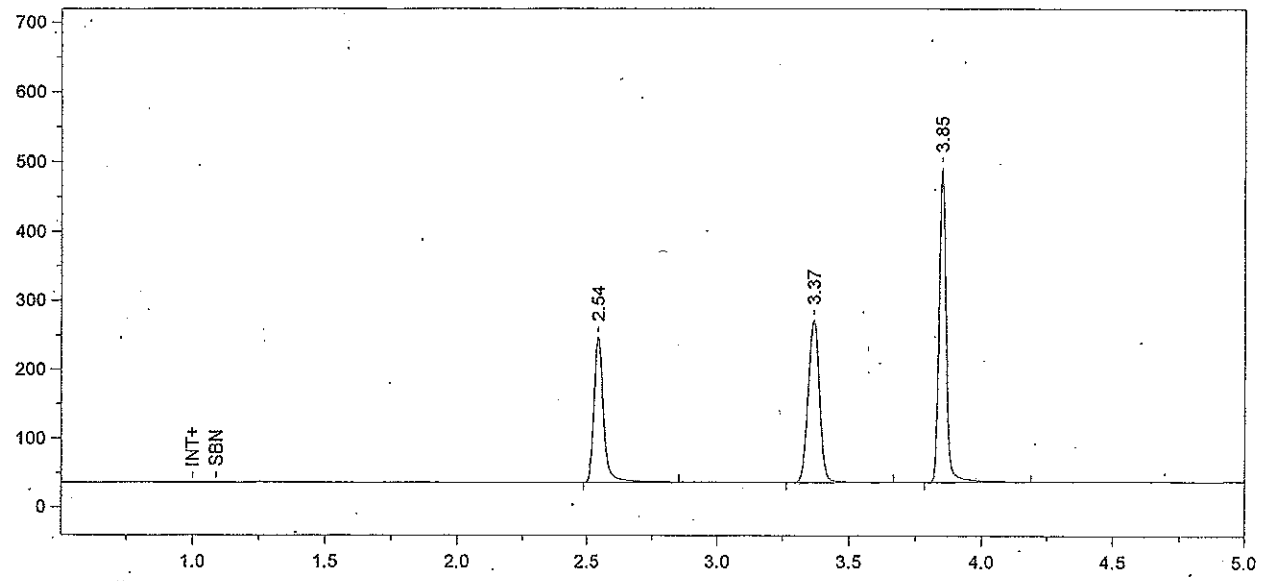
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	557652	0.1248	0.1019
2	3.37	t-Butanol	690914	0.9993	0.8156
3	3.85	n-Propanol	846627	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011 Today's Time = 4:41:22 PM
Bound File Name = Sim121411.0012.RAW
Sample Name = 0.1 MCS
Date Taken = 12/14/2011 4:41:17 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 181

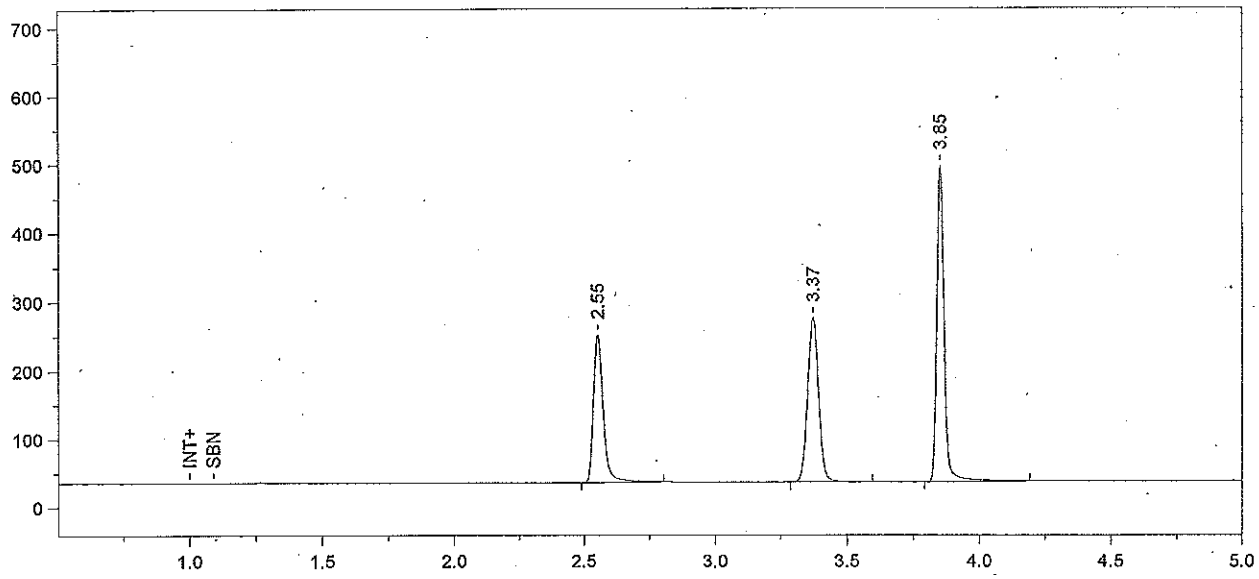
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
2	2.56	Ethanol	577713	0.1247	0.1018
3	3.37	t-Butanol	714698	0.9973	0.8140
4	3.85	n-Propanol	877566	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011 Today's Time = 4:56:17 PM
Bound File Name = Sim121411.0013.RAW
Sample Name = 0.1 MCS
Date Taken = 12/14/2011 4:56:16 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 181

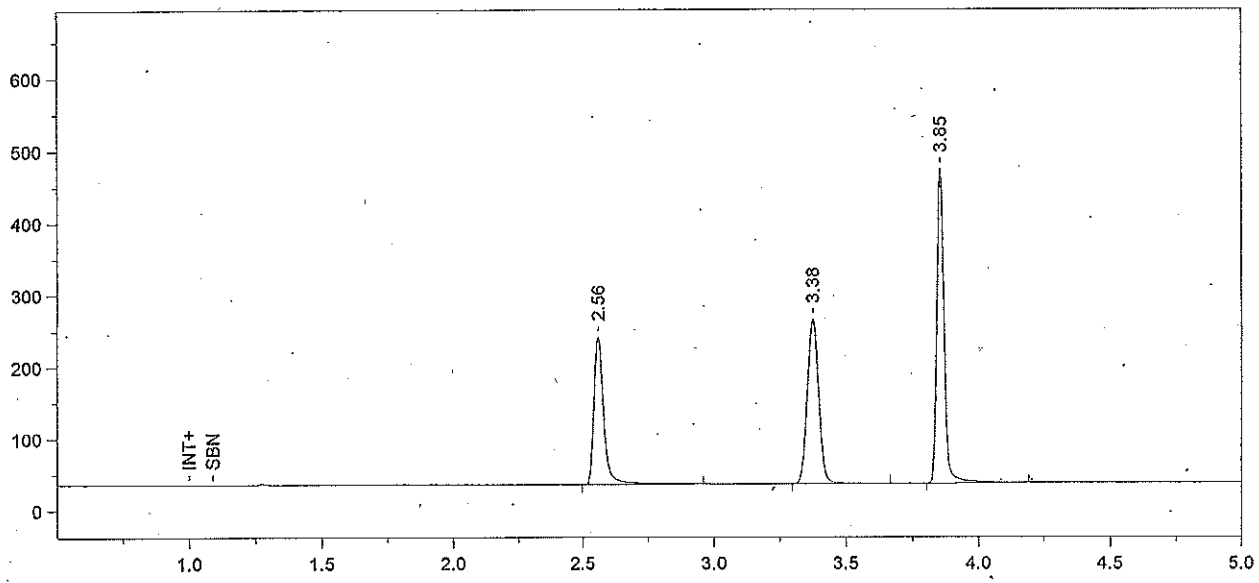
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.54	Ethanol	559281	0.1231	0.1005
2	3.37	t-Butanol	702257	0.9988	0.8152
3	3.85	n-Propanol	860943	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011
Today's Time = 5:11:24 PM
Bound File Name = Sim121411.0014.RAW
Sample Name = 0.1 MCS
Date Taken = 12/14/2011 5:11:23 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 181

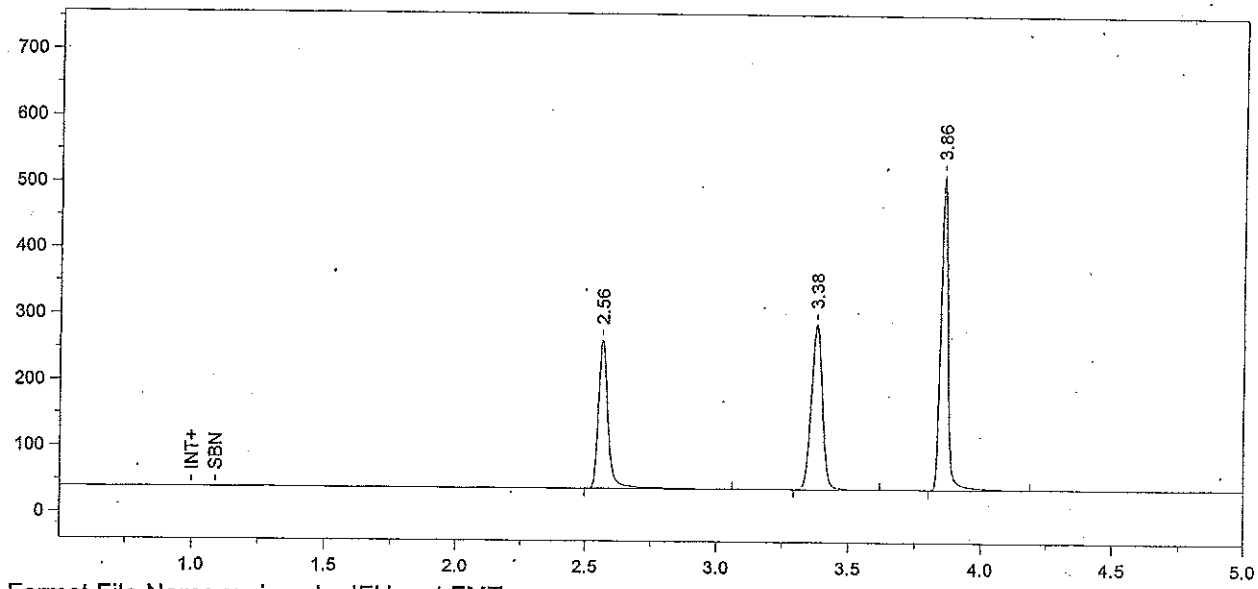
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	559573	0.1220	0.0996
2	3.37	t-Butanol	706883	0.9960	0.8129
3	3.85	n-Propanol	869069	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011
Today's Time = 5:26:29 PM
Bound File Name = Sim121411.0015.RAW
Sample Name = 0.1 SRM
Date Taken = 12/14/2011 5:26:24 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 181

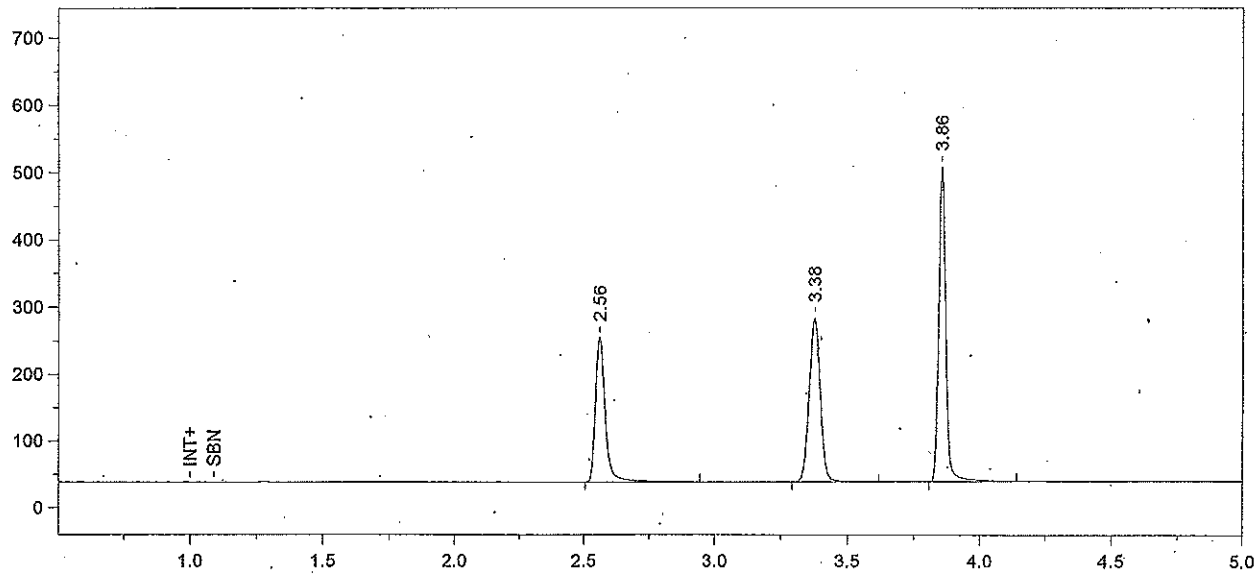
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.56	Ethanol	543962	0.1234	0.1007
2	3.38	t-Butanol	679629	0.9966	0.8134
3	3.85	n-Propanol	835046	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011
Today's Time = 5:41:22 PM
Bound File Name = Sim121411.0016.RAW
Sample Name = 0.1 SRM
Date Taken = 12/14/2011 5:41:19 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 181

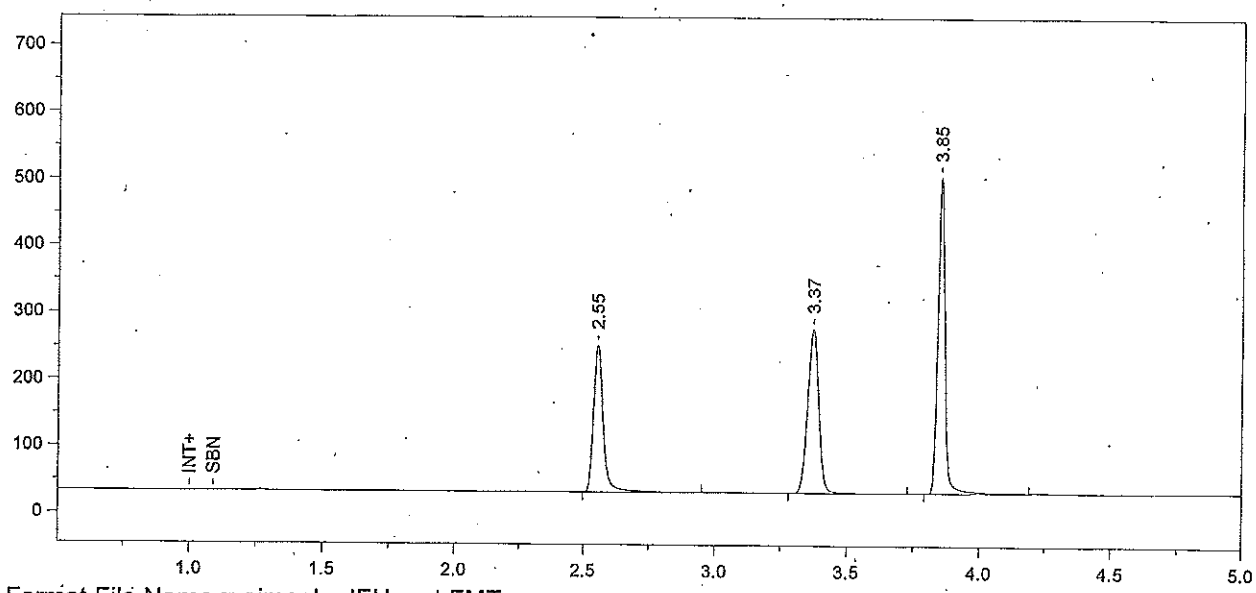
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.56	Ethanol	590989	0.1244	0.1015
2	3.38	t-Butanol	733985	0.9981	0.8147
3	3.86	n-Propanol	900471	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011
Today's Time = 5:56:25 PM
Bound File Name = Sim121411.0017.RAW
Sample Name = 0.1 SRM
Date Taken = 12/14/2011 5:56:20 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 181

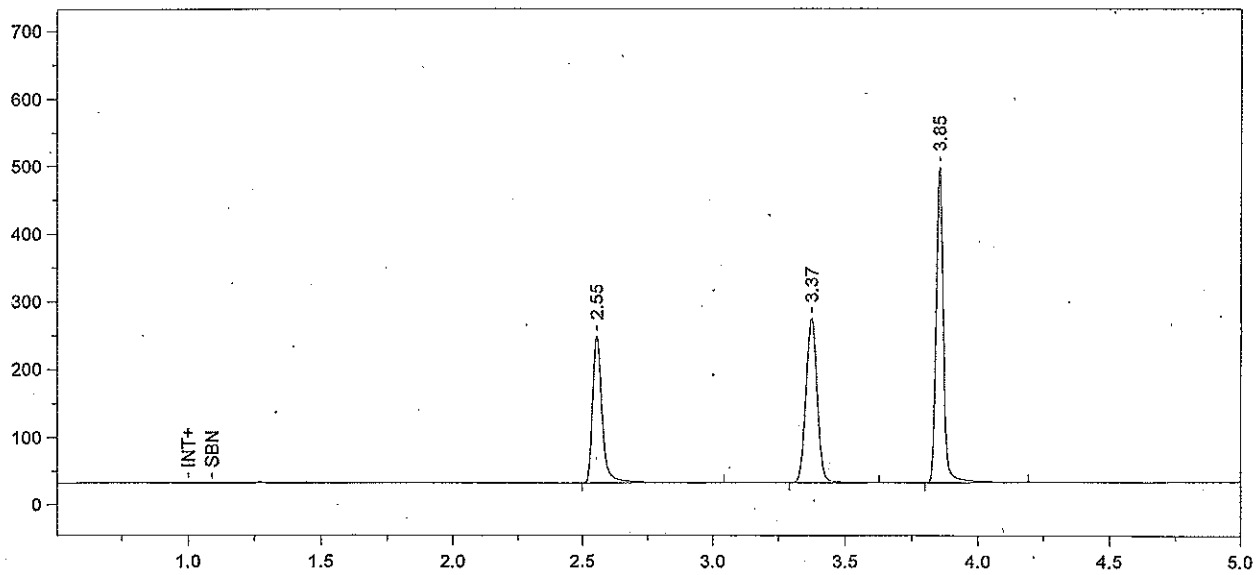
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.56	Ethanol	573078	0.1237	0.1010
2	3.38	t-Butanol	719996	1.0044	0.8198
3	3.86	n-Propanol	877817	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011
Today's Time = 6:11:25 PM
Bound File Name = Sim121411.0018.RAW
Sample Name = 0.1 SRM
Date Taken = 12/14/2011 6:11:21 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 181

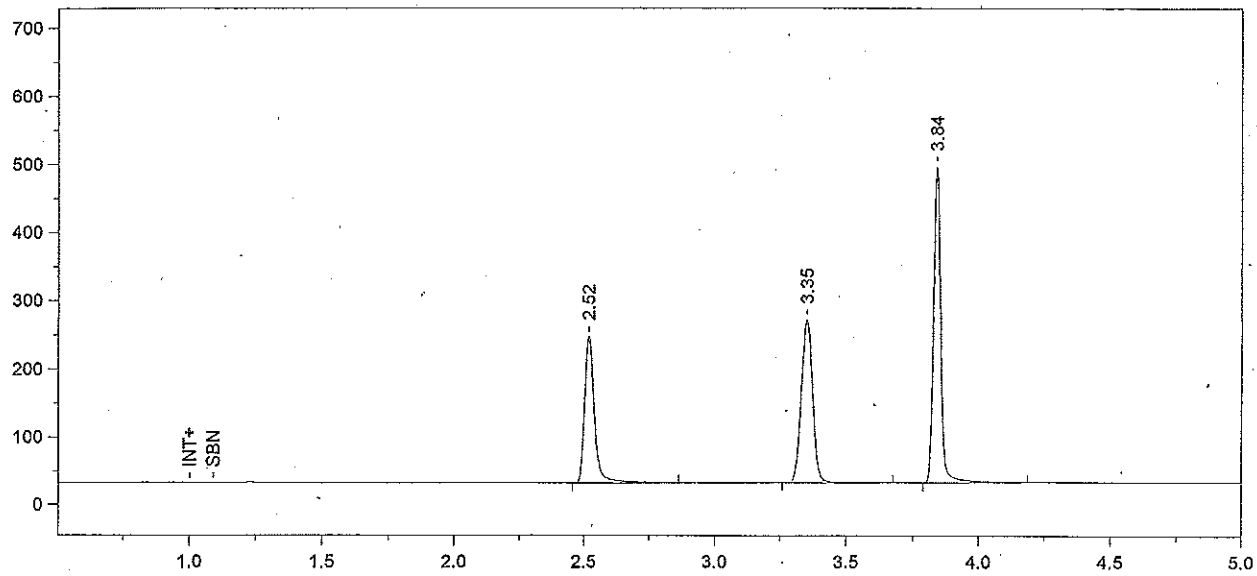
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	582803	0.1239	0.1011
2	3.37	t-Butanol	726470	0.9980	0.8146
3	3.85	n-Propanol	891339	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011
Today's Time = 6:26:26 PM
Bound File Name = Sim121411.0019.RAW
Sample Name = 0.1 SRM
Date Taken = 12/14/2011 6:26:23 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 181

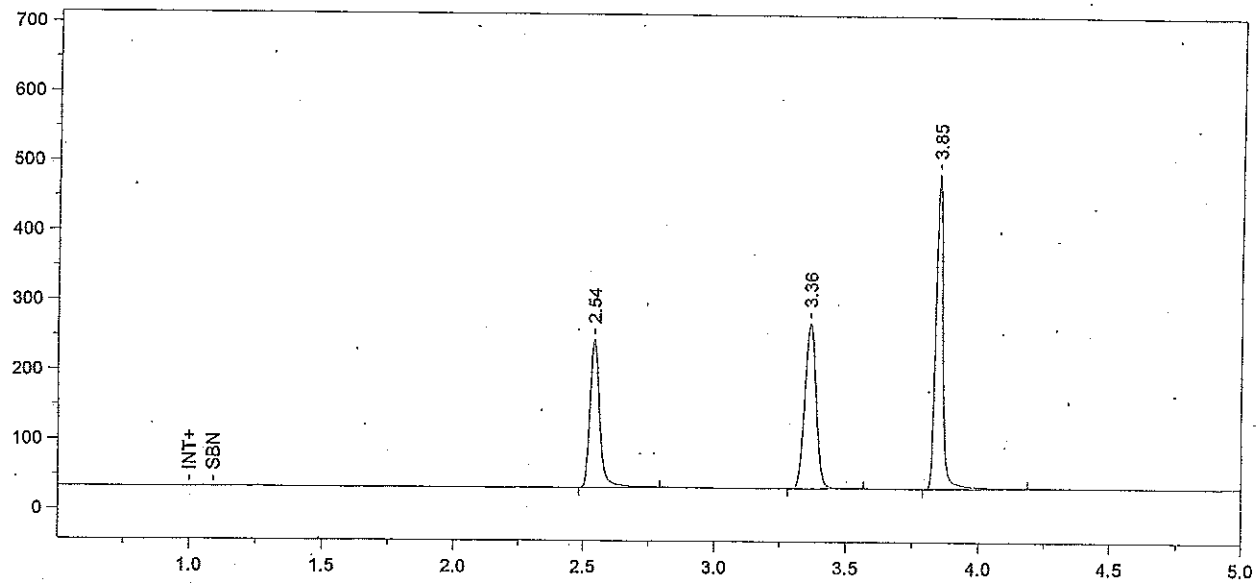
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.55	Ethanol	576989	0.1242	0.1014
2	3.37	t-Butanol	717093	0.9974	0.8140
3	3.85	n-Propanol	880415	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011 Today's Time = 6:41:31 PM
Bound File Name = Sim121411.0020.RAW
Sample Name = 0.1 SRM
Date Taken = 12/14/2011 6:41:26 PM VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal Calibration Version = 181

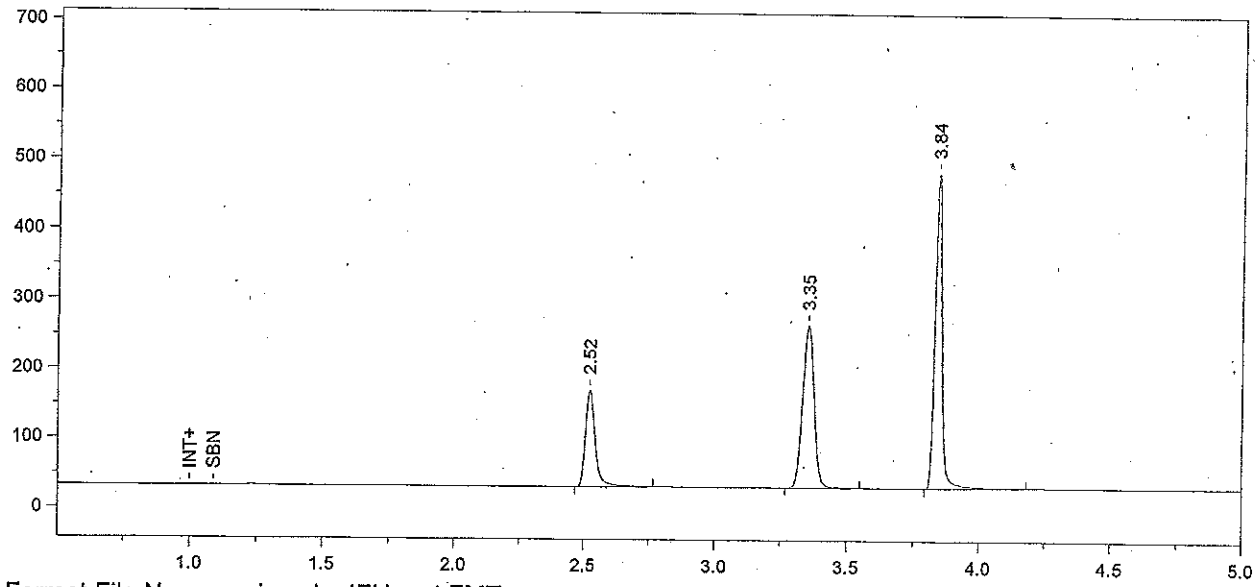
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.52	Ethanol	578062	0.1233	0.1006
2	3.35	t-Butanol	724346	0.9982	0.8147
3	3.84	n-Propanol	888603	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011
Today's Time = 6:56:32 PM
Bound File Name = Sim121411.0021.RAW
Sample Name = 0.1 SRM
Date Taken = 12/14/2011 6:56:27 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 181

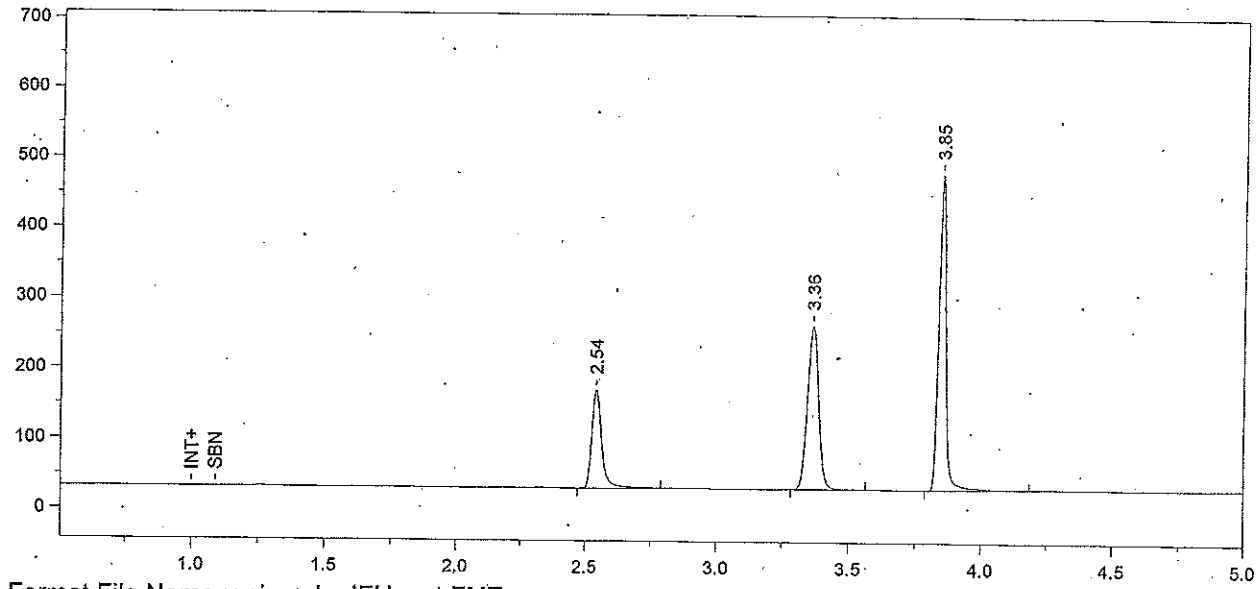
Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.54	Ethanol	558759	0.1217	0.0994
2	3.36	t-Butanol	705807	0.9936	0.8110
3	3.85	n-Propanol	869803	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011
Today's Time = 7:11:35 PM
Bound File Name = Sim121411.0022.RAW
Sample Name = CCS B
Date Taken = 12/14/2011 7:11:28 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 181

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.52	Ethanol	371125	0.0813	0.0663
2	3.35	t-Butanol	702077	0.9938	0.8111
3	3.84	n-Propanol	865080	1.0000	0.8162



Format File Name = simsoln-JFH.met.FMT

Today's Date = 12/14/2011
Today's Time = 7:26:34 PM
Bound File Name = Sim121411.0023.RAW
Sample Name = CCS B
Date Taken = 12/14/2011 7:26:30 PM
VDH Headspace Alcohol
Method file = simsoln.met
Calibration file = SimSolution.cal
Calibration Version = 181

Peak Number	Ret Time (min)	Peak Name	Area	Amount % WT/VOL	Headspace Conversion
1	2.54	Ethanol	368814	0.0818	0.0668
2	3.36	t-Butanol	691562	0.9917	0.8094
3	3.85	n-Propanol	853915	1.0000	0.8162