

Sample Information

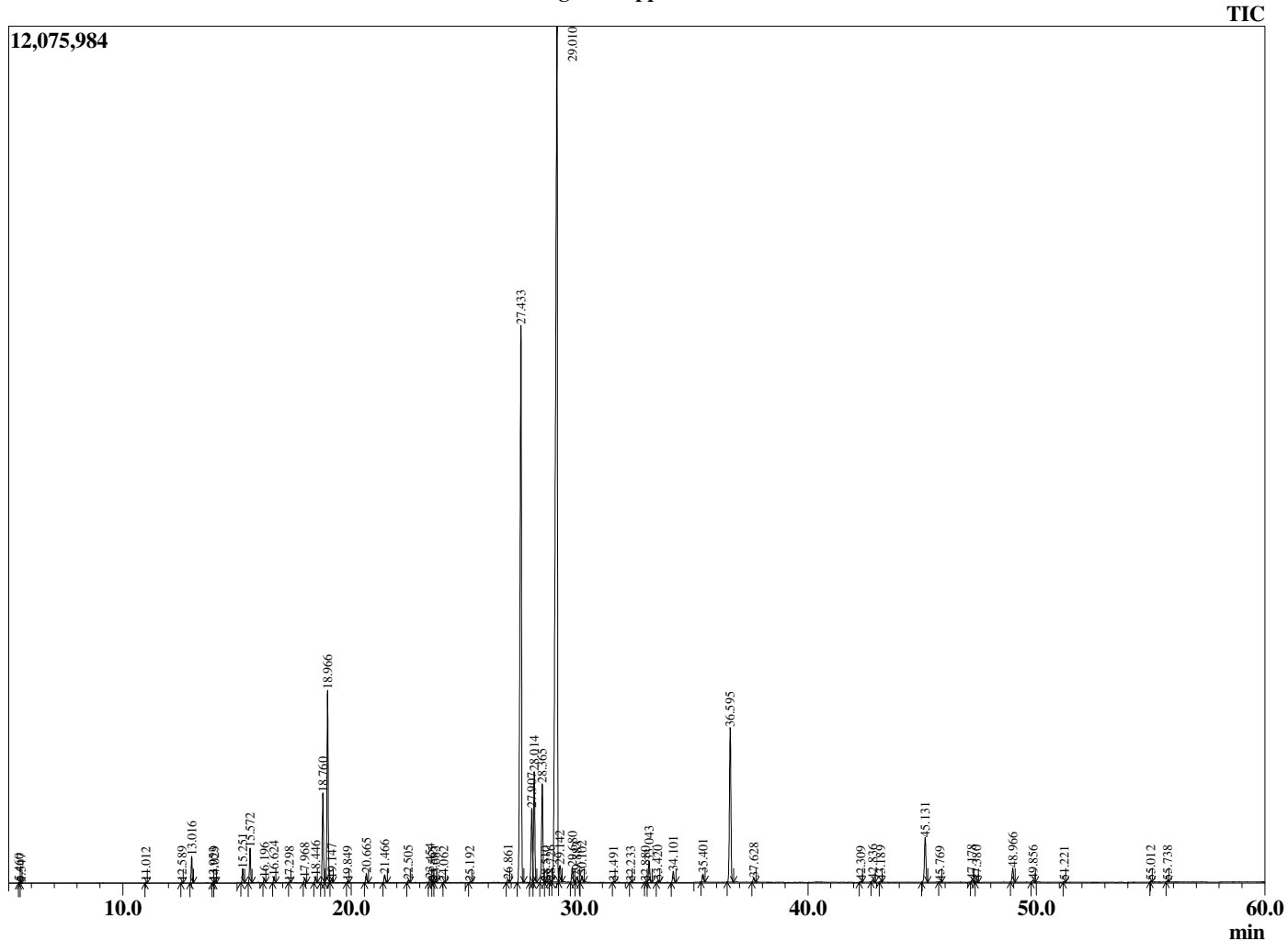
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 9/3/2020 4:47:35 AM
 Sample Type : Essential Oil
 Sample Name : Peppermint - Barefut
 Sample ID : 0116
 Injection Volume : 0.10
 Instrument ID: : GC-3



Peak Report TIC

R.Time	Name	Area%
4.243	3-Methylbutanal	0.01
5.460	Isoamyl alcohol	0.01
5.547	2-Methyl butanol	0.01
11.012	2,5-Diethyltetrahydrofuran	0.02
12.589	alpha-Thujene	0.03
13.016	alpha-Pinene	0.69
13.953	Camphene	0.02
14.029	3-Methylcyclohexanone	0.04
15.251	Sabinene	0.37
15.572	beta-Pinene	0.99
16.196	Myrcene	0.12
16.624	3-Octanol	0.18
17.298	alpha-Phellandrene	0.02
17.968	alpha-Terpinene	0.14
18.446	para-Cymene	0.18
18.760	Limonene	2.72
18.966	1,8-Cineole	5.92
19.147	cis-beta-Ocimene	0.11
19.849	trans-beta-Ocimene	0.04
20.665	gamma-Terpinene	0.28
21.466	trans-Sabinene hydrate	0.26
22.505	Terpinolene	0.08
23.454	Linalool	0.13
23.565	cis-Sabinene hydrate	0.03
23.683	2-Methylbutyl 2-methylbutyrate	0.04
24.062	2-Methylbutyl isovalerate	0.02
25.192	cis-para-Menth-2-en-1-ol	0.02
26.861	Isopulegol	0.09
27.433	Menthone	21.95
27.907	Menthofuran	2.53
28.014	Isomenthone	3.68
28.365	Neomenthol	3.43
28.510	Unidentified	0.03
28.726	trans-Isopulegone	0.04
29.010	Menthol	44.05
29.142	Terpinen-4-ol	0.63
29.680	Isomenthol	0.51
29.883	Neoisomenthol	0.18
30.102	alpha-Terpineol	0.23
31.491	Unidentified	0.02
32.233	Citronellol	0.01
32.880	Hex-(3Z)-enyl isovalerate	0.02
33.043	Pulegone	0.74
33.420	Carvone	0.05
34.101	Piperitone	0.39
35.401	Neomenthyl acetate	0.28
36.595	Menthyl acetate	5.75
37.628	Isomenthyl acetate	0.17
42.309	alpha-Copaene	0.03
42.836	beta-Bourbonene	0.10
43.189	beta-Elementene	0.04
45.131	beta-Caryophyllene	1.77
45.769	beta-Copaene	0.02
47.178	trans-beta-Farnesene	0.07
47.380	alpha-Humulene	0.04
48.966	Germacrene D	0.50
49.856	Bicyclogermacrene	0.09
51.221	delta-Cadinene	0.02
55.012	Caryophyllene oxide	0.02
55.738	Viridiflorol	0.04
		100.00

Chromatogram Peppermint - Barefut



Comments:

The analysis of this Peppermint batch sample meets the expected chemical profile for authentic essential oil of *Mentha piperita*. No contamination or adulteration was detected. The results provided in this GCMS quality analysis reflect the chemical composition of the oil and lot referenced above on the date of analysis.