

Sample Information

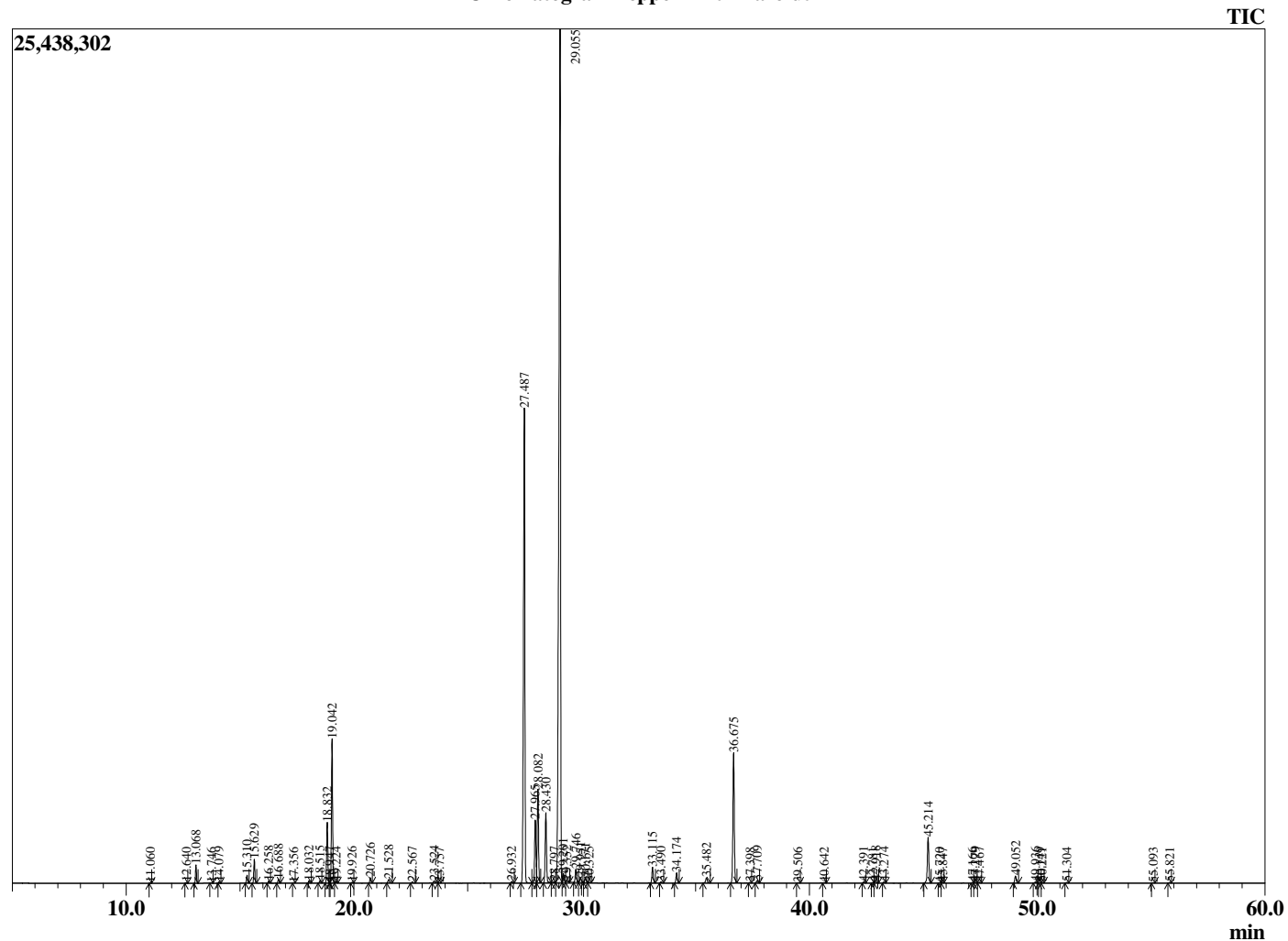
Analyzed by : Dr. Robert S. Pappas  
 Analyzed : 2/4/2020 2:17:51 AM  
 Sample Type : Essential Oil  
 Sample Name : Peppermint - Barefut  
 Sample ID : 0115  
 Injection Volume : 0.10  
 Instrument ID: GC-3



Peak Report TIC

R.Time	Name	Area%
11.060	2,5-Diethyltetrahydrofuran	0.01
12.640	alpha-Thujene	0.02
13.068	alpha-Pinene	0.58
13.746	cis-3-Methylcyclohexanol	0.02
14.079	3-Methylcyclohexanone	0.04
15.310	Sabinene	0.28
15.629	beta-Pinene	0.82
16.258	Myrcene	0.07
16.688	3-Octanol	0.15
17.356	alpha-Phellandrene	0.01
18.032	alpha-Terpinene	0.09
18.515	para-Cymene	0.10
18.832	Limonene	2.27
18.947	beta-Phellandrene	0.02
19.042	1,8-cineole	5.40
19.224	cis-beta-Ocimene	0.05
19.926	trans-beta-Ocimene	0.03
20.726	gamma-Terpinene	0.20
21.528	trans-Sabinene hydrate	0.18
22.567	Terpinolene	0.06
23.524	Linalool	0.14
23.757	2-Methylbutyl-2-methylbutyrate	0.02
26.932	Neoisopulegol	0.07
27.487	Menthone	21.32
27.965	Menthofuran	2.66
28.082	Isomenthone	3.92
28.430	Neomenthol	3.04
28.797	trans-Isopulegone	0.06
29.055	Menthol	46.29
29.201	Terpinen-4-ol	0.46
29.352	Unidentified	0.10
29.746	Isomenthol	0.56
29.951	Neoisomenthol	0.23
30.171	alpha-Terpineol	0.22
30.325	Unidentified	0.02
33.115	Pulegone	0.67
33.490	Carvone	0.04
34.174	Piperitone	0.44
35.482	Neomenthyl acetate	0.27
36.675	Menthyl acetate	5.77
37.398	Unidentified	0.02
37.709	Isomenthyl acetate	0.11
39.506	delta-Elementene	0.02
40.642	Unidentified	0.02
42.391	alpha-Copaene	0.06
42.781	Unidentified	0.02
42.918	beta-Bourbonene	0.11
43.274	beta-Elementene	0.04
45.214	beta-Caryophyllene	2.19
45.720	Unidentified	0.02
45.847	beta-Copaene	0.03
47.166	trans-Murrola-3,5-diene	0.02
47.279	trans-beta-Farnesene	0.04
47.467	alpha-Humulene	0.05
49.052	Germacrene D	0.33
49.936	Bicyclogermacrene	0.07
50.149	Unidentified	0.02
50.221	Unidentified	0.02
51.304	delta-Cadinene	0.03
55.093	Caryophyllene oxide	0.02
55.821	Viridiflorol	0.03
		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.