

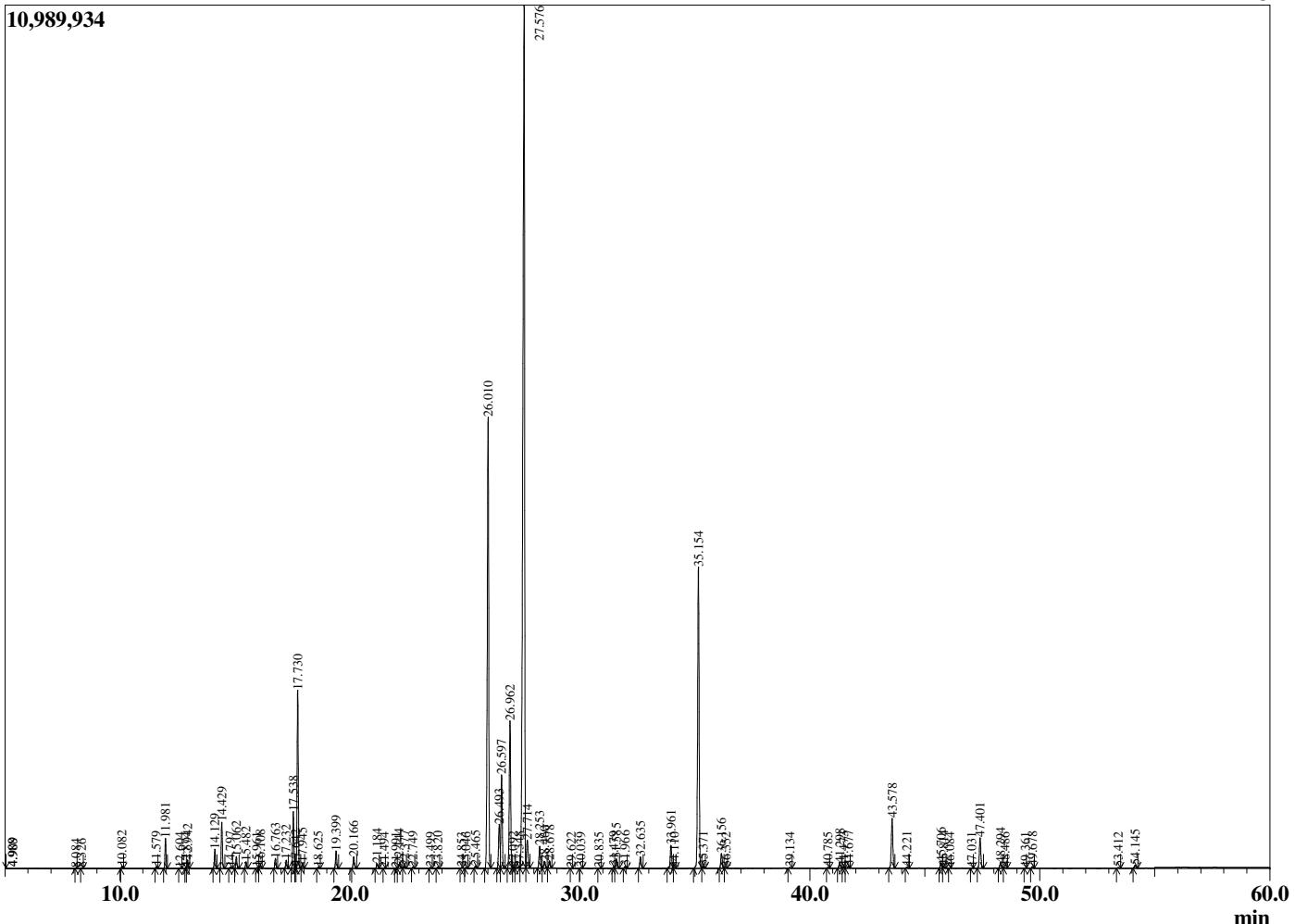
Sample Information

Analyzed by : Dr. Robert S. Pappas
 Analyzed : 6/15/2020 10:35:19 AM
 Sample Type : Essential Oil
 Sample Name : Peppermint - Revive
 Sample ID : 8404
 Injection Volume : 0.10
 Instrument ID: : GC-3



Peak Report TIC

R.Time	Name	Area%
3.802	Valeraldehyde	0.02
3.904	2-Methylbutanal	0.01
4.909	1-Pentanol	0.03
4.988	2-Methyl butanol	0.01
8.084	Ethyl 2-methylbutyrate	0.01
8.326	Hex-3(Z)-enol	0.01
10.082	2,5-Diethyltetrahydrofuran	0.05
11.579	alpha-Thujene	0.05
11.981	alpha-Pinene	0.78
12.604	cis-3-Methylcyclohexanol	0.02
12.874	Camphene	0.02
12.942	3-Methylcyclohexanone	0.23
14.129	Sabinene	0.54
14.429	beta-Pinene	1.38
14.797	3-Octanone	0.04
15.062	Myrcene	0.34
15.482	3-Octanol	0.19
15.961	Pseudolimonene	0.02
16.108	alpha-Phellandrene	0.09
16.763	alpha-Terpinene	0.30
17.232	para-Cymene	0.25
17.538	Limonene	1.71
17.642	beta-Phellandrene	0.05
17.730	1,8-cineole	5.42
17.945	cis-beta-Ocimene	0.16
18.625	trans-beta-Ocimene	0.05
19.399	gamma-Terpinene	0.54
20.166	trans-Sabinene hydrate	0.38
21.184	Terpinolene	0.16
21.494	para-Cymenene	0.01
21.991	3-Nonanol	0.02
22.144	Linalool	0.18
22.377	2-Methylbutyl 2-methylbutyrate	0.06
22.749	2-Methylbutyl isovalerate	0.04
23.499	3-Octyl acetate	0.03
23.820	cis-para-Menth-2-en-1-ol	0.04
24.853	trans-Sabinol	0.01
25.046	trans-para-Menth-2-en-1-ol	0.03
25.465	Isopulegol	0.08
26.010	Menthone	16.54
26.493	Menthofuran	1.57
26.597	Isomenthone	3.13
26.962	Neomenthol	5.17
27.092	Borneol	0.03
27.348	Isopinocamphone	0.07
27.576	Menthol	39.75
27.714	Terpinen-4-ol	1.07
28.253	Isomenthol	0.76
28.460	Neoisomenthol	0.25
28.678	alpha-Terpineol	0.25
29.622	trans-Piperitol	0.01
30.039	Unidentified	0.02
30.835	Citronellol	0.02
31.479	Hex-(Z)-enyl isovalerate	0.06
31.585	Pulegone	0.35
31.966	Carvone	0.07
32.635	Piperitone	0.41
33.961	Neomenthyl acetate	0.89
34.110	Unidentified	0.02
35.154	Menthyl acetate	11.38
35.371	Dihydroeudulan I	0.06
36.156	Neomenthyl acetate	0.54



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.

R.Time	Name	Area%
36.352	Unidentified	0.03
39.134	Eugenol	0.03
40.785	alpha-Copaene	0.02
41.298	beta-Bourbonene	0.18
41.473	Unidentified	0.03
41.677	beta-Elemene	0.08
43.578	beta-Caryophyllene	1.95
44.221	beta-Copaene	0.03
45.706	trans-beta-Farnesene	0.21
45.814	alpha-Humulene	0.07
46.084	Alloaromadendrene	0.01
47.031	Unidentified	0.01
47.401	Germacrene D	1.18
48.294	Bicyclogermacrene	0.20
48.486	alpha-Murolene	0.02
49.361	gamma-Cadinene	0.01
49.678	delta-Cadinene	0.06
53.412	Caryophyllene oxide	0.03
54.145	Viridiflorol	0.12
		100.00