

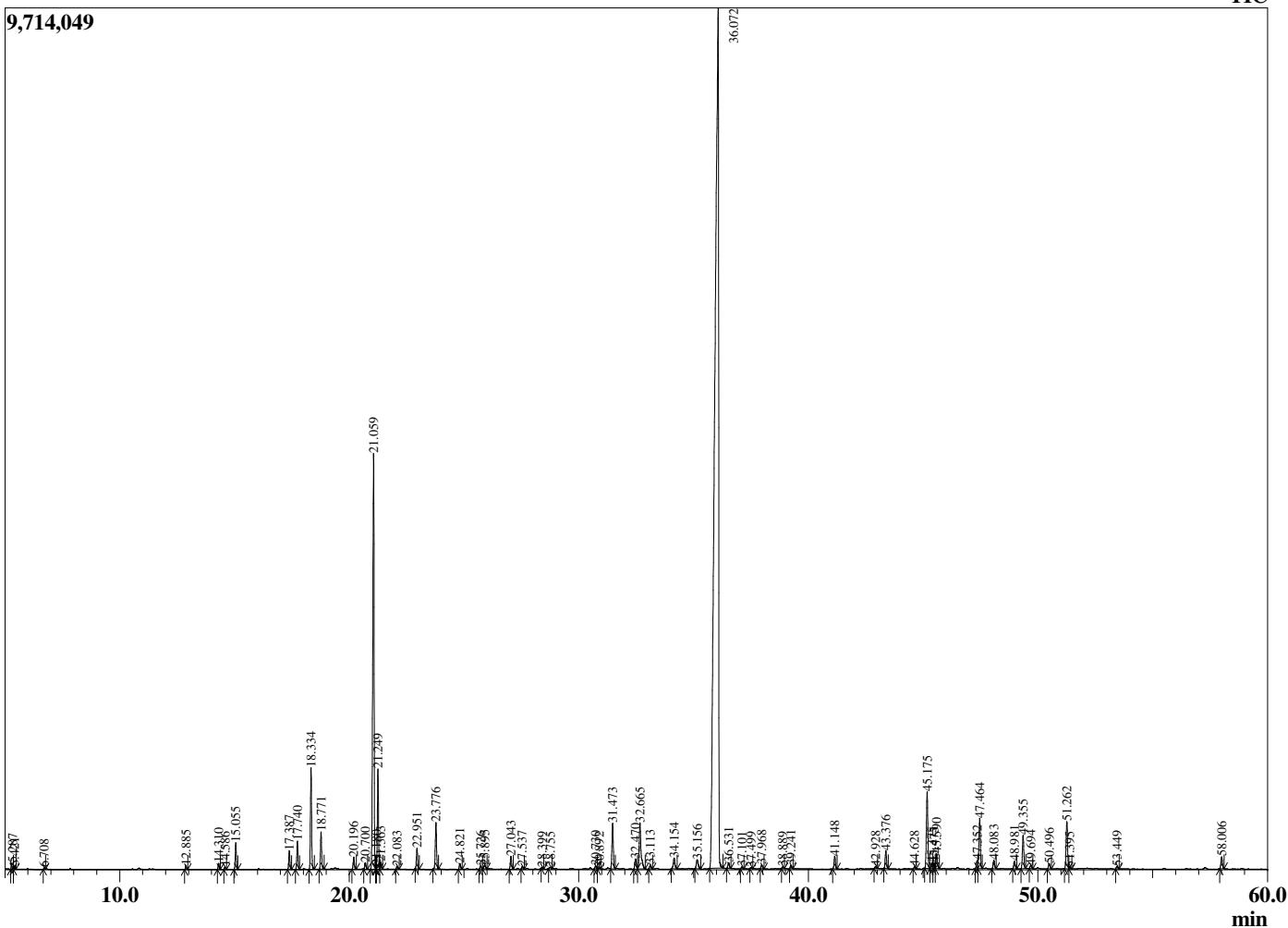
### Sample Information

Analyzed by : Dr. Robert S. Pappas  
 Analyzed : 6/17/2020 11:39:14 PM  
 Sample Type : Essential Oil  
 Sample Name : Spearmint - Revive  
 Sample ID : 8420  
 Injection Volume : 0.10  
 Instrument ID: : GC-2



### Peak Report TIC

R.Time	Name	Area%
5.287	3-Methylbutanal	0.09
5.421	2-Methylbutanal	0.04
6.708	Isoamyl alcohol	0.03
12.885	2,5-Diethyltetrahydrofuran	0.08
14.310	Hashishene	0.13
14.586	alpha-Thujene	0.05
15.055	alpha-Pinene	0.57
17.387	Sabinene	0.43
17.740	beta-Pinene	0.64
18.334	Myrcene	2.29
18.771	3-Octanol	0.86
20.196	alpha-Terpinene	0.29
20.700	para-Cymene	0.16
21.059	Limonene	11.20
21.180	beta-Phellandrene	0.05
21.249	1,8-Cineole	2.29
21.363	cis-beta-Ocimene	0.16
22.083	trans-beta-Ocimene	0.07
22.951	gamma-Terpinene	0.50
23.776	trans-Sabinene hydrate	1.18
24.821	Terpinolene	0.14
25.726	Linalool	0.09
25.895	cis-Sabinene hydrate	0.12
27.043	3-Octyl acetate	0.33
27.537	cis-para-Menth-2-en-1-ol	0.06
28.399	trans-Limonene oxide	0.03
28.755	trans-para-Menth-2-en-1-ol	0.05
30.730	delta-Terpineol	0.08
30.892	Borneol	0.03
31.473	Terpenen-4-ol	1.24
32.470	alpha-Terpineol	0.31
32.665	cis-Dihydrocarvone	1.66
33.113	trans-Dihydrocarvone	0.11
34.154	trans-Carveol	0.36
35.156	cis-Carveol	0.33
36.072	Carvone	64.38
36.531	Piperitone	0.16
37.101	Unidentified	0.05
37.499	Isopiperitenone	0.03
37.968	Unidentified	0.10
38.889	Dihydroedulan I	0.05
39.241	Dihydroedulan II	0.09
41.148	trans-Dihydrocarvyl acetate	0.35
42.928	Eugenol	0.05
43.376	cis-Caryl acetate	0.48
44.628	alpha-Copaene	0.06
45.175	beta-Bourbonene	2.21
45.375	alpha-Bourbonene	0.16
45.475	beta-Elemene	0.15
45.590	(Z)-Jasmone	0.41
47.352	beta-Ylangene	0.22
47.464	beta-Caryophyllene	1.48
48.083	beta-Copaene	0.25
48.981	Unidentified	0.22
49.355	trans-beta-Farnesene	0.93
49.694	alpha-Humulene	0.10
50.496	Unidentified	0.15
51.262	Germacrene D	1.38
51.395	Phenethyl 2-methylbutyrate	0.05
53.449	delta-Cadinene	0.08
58.006	Viridiflorol	0.36
		100.00



### Comments:

The analysis of this Spearmint batch sample meets the expected chemical profile for authentic essential oil of *Mentha spicata*. 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.