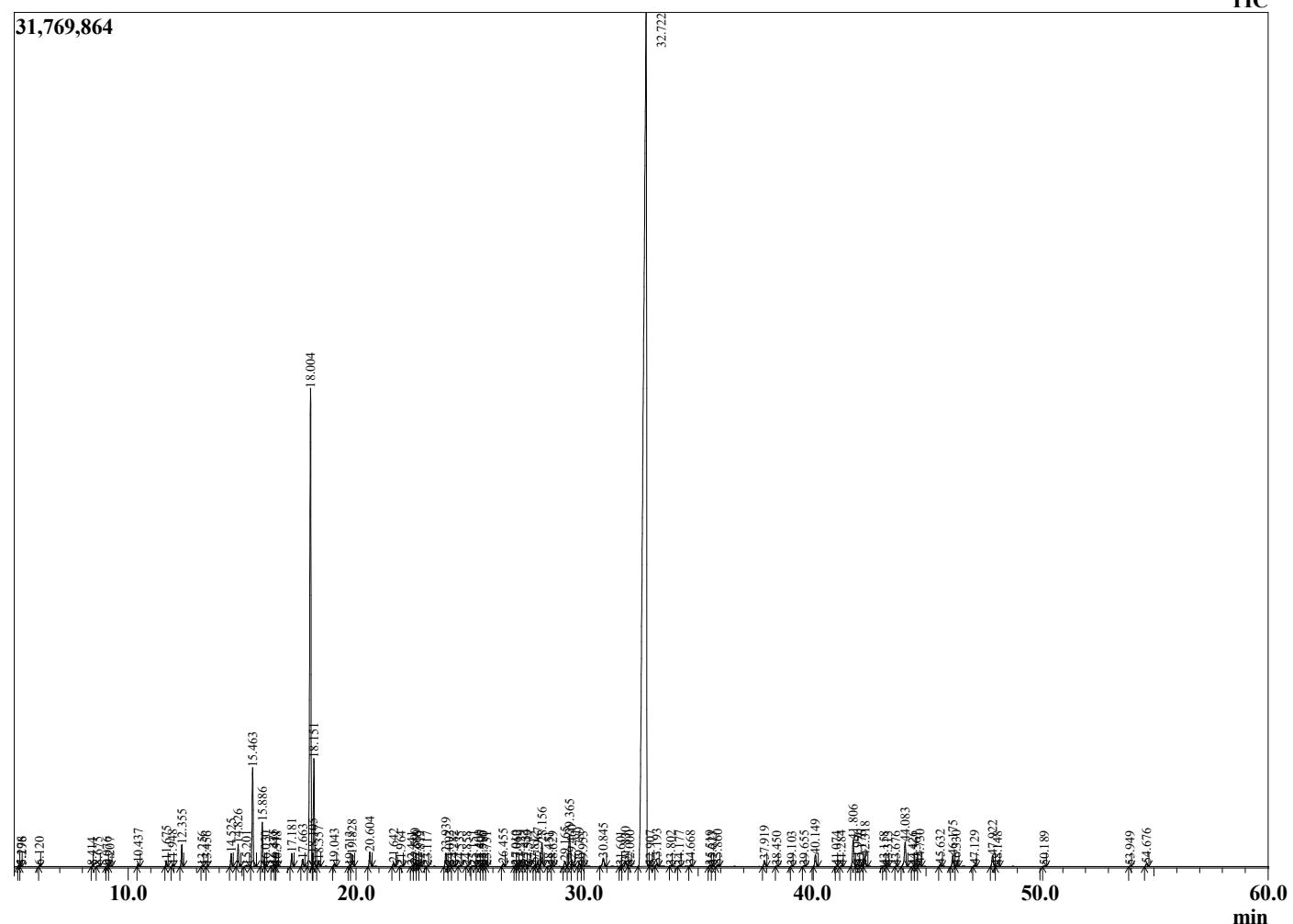


Sample Information

Analyzed by : Dr. Robert S. Pappas
Analyzed : 06/04/2024 12:22:02 PM
Sample Type : Essential Oil
Sample Name : Spearmint EO
Sample ID : 9B
Injection Volume : 0.10
Instrument ID: : GC-3



Chromatogram Spearmint EO - Revive



Comments:

The analysis of this Spearmint EO 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.

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Peak Report TIC

R.Time	Name	Area%
3.757	Isobutyl alcohol	0.01
4.060	3-Methylbutanal	0.05
4.165	2-Methylbutanal	0.03
4.606	2-Ethyl furan	0.02
5.198	1-Pentanol	0.02
5.276	2-Methylbutanol	0.02
6.120	Methyl 2-methylbutyrate	0.01
8.414	Ethyl 2-methylbutyrate	0.01
8.675	Hex-(3Z)-enol	0.03
9.076	Hex-(2E)-enol	0.01
9.207	Hexanol	0.01
10.437	2,5-Diethyl tetrahydrofuran	0.07
11.675	Hashishene	0.13
11.948	alpha-Thujene	0.04
12.355	alpha-Pinene	0.51
13.256	Camphepane	0.01
13.456	Thuja-2,4(10)-diene	0.01
14.525	Sabinene	0.33
14.826	beta-Pinene	0.59
15.201	3-Octanone	0.05
15.463	Myrcene	2.52
15.886	3-Octanol	1.15
16.030	Unidentified	0.01
16.375	Pseudolimonene	0.06
16.441	Unidentified	0.02
16.518	alpha-Phellandrene	0.02
17.181	alpha-Terpinene	0.36
17.663	para-Cymene	0.21
18.004	Limonene	14.92
18.105	beta-Phellandrene	0.10
18.151	1,8-Cineole	2.67
18.357	cis-beta-Ocimene	0.16
19.043	trans-beta-Ocimene	0.08
19.713	Unidentified	0.01
19.828	gamma-Terpinene	0.34
20.604	trans-Sabinene hydrate	0.42
21.642	Terpinolene	0.10
21.964	para-Cymenene	0.02
22.441	3-Nonanol	0.01
22.590	Linalool	0.08
22.669	cis-Sabinene hydrate	0.04
22.819	2-Methylbutyl-2-methylbutyrate	0.02
23.117	1-Octen-3-yl acetate	0.01
23.939	3-Octyl acetate	0.40
24.092	trans-para-Mentha-2,8-dienol	0.02
24.282	cis-para-Menth-2-en-1-ol	0.03
24.535	Unidentified	0.02
24.858	cis-Limonene oxide	0.00
25.151	trans-Limonene oxide	0.04
25.400	trans-Pinocarveol	0.03
25.505	trans-para-Menth-2-en-1-ol	0.03
25.580	Unidentified	0.01
25.731	trans-Verbenol	0.01
26.455	Menthone	0.08
27.010	Unidentified	0.03
27.062	Unidentified	0.03
27.229	para-Mentha-1,5-dien-8-ol	0.03
27.434	delta-Terpineol	0.08
27.549	Borneol	0.02
27.812	Unidentified	0.00
27.967	Menthol	0.13
28.156	Terpinen-4-ol	0.76

R.Time	Name	Area%
28.451	Unidentified	0.02
28.629	Unidentified	0.01
29.165	alpha-Terpineol	0.18
29.365	cis-Dihydrocarvone	1.19
29.460	trans-Dihydrocarveol	0.19
29.789	trans-Dihydrocarvone	0.10
29.953	Unidentified	0.01
30.845	trans-Carveol	0.33
31.601	Unidentified	0.01
31.830	cis-Carveol	0.18
32.000	Hex-(3Z)-enyl 2-methylbutyrate	0.03
32.722	Carvone	66.21
32.907	Carvotanacetone	0.02
33.193	Piperitone	0.09
33.802	cis-Carvone oxide	0.02
34.177	Unidentified	0.02
34.668	trans-Carvone oxide	0.05
35.519	Dihydroedulan I	0.04
35.623	Unidentified	0.02
35.860	Dihydroedulan II	0.06
37.919	trans-Dihydrocarvyl acetate	0.20
38.450	cis-Carvyl acetate	0.01
39.103	Myrcen-8-yl acetate	0.01
39.655	Eugenol	0.02
40.149	cis-Carvyl acetate	0.39
41.074	Unidentified	0.01
41.284	alpha-Copaene	0.03
41.806	beta-Bourbonene	0.91
41.996	alpha-Bourbonene	0.07
42.176	beta-Elemene	0.05
42.318	cis-Jasmone	0.33
43.158	cis-beta-Caryophyllene	0.01
43.313	Unidentified	0.01
43.676	Unidentified	0.01
44.083	beta-Caryophyllene	0.93
44.426	Unidentified	0.01
44.561	Unidentified	0.02
44.730	beta-Copaene	0.09
45.632	Octyl isovalerate	0.07
46.175	trans-beta-Farnesene	0.36
46.330	alpha-Humulene	0.04
47.129	Unidentified	0.05
47.922	Germacrene D	0.39
48.148	Phenethyl 2-methylbutyrate	0.02
50.189	delta-Cadinene	0.02
53.949	Caryophyllene oxide	0.01
54.676	Viridiflorol	0.11
		100.00