

Sample Information

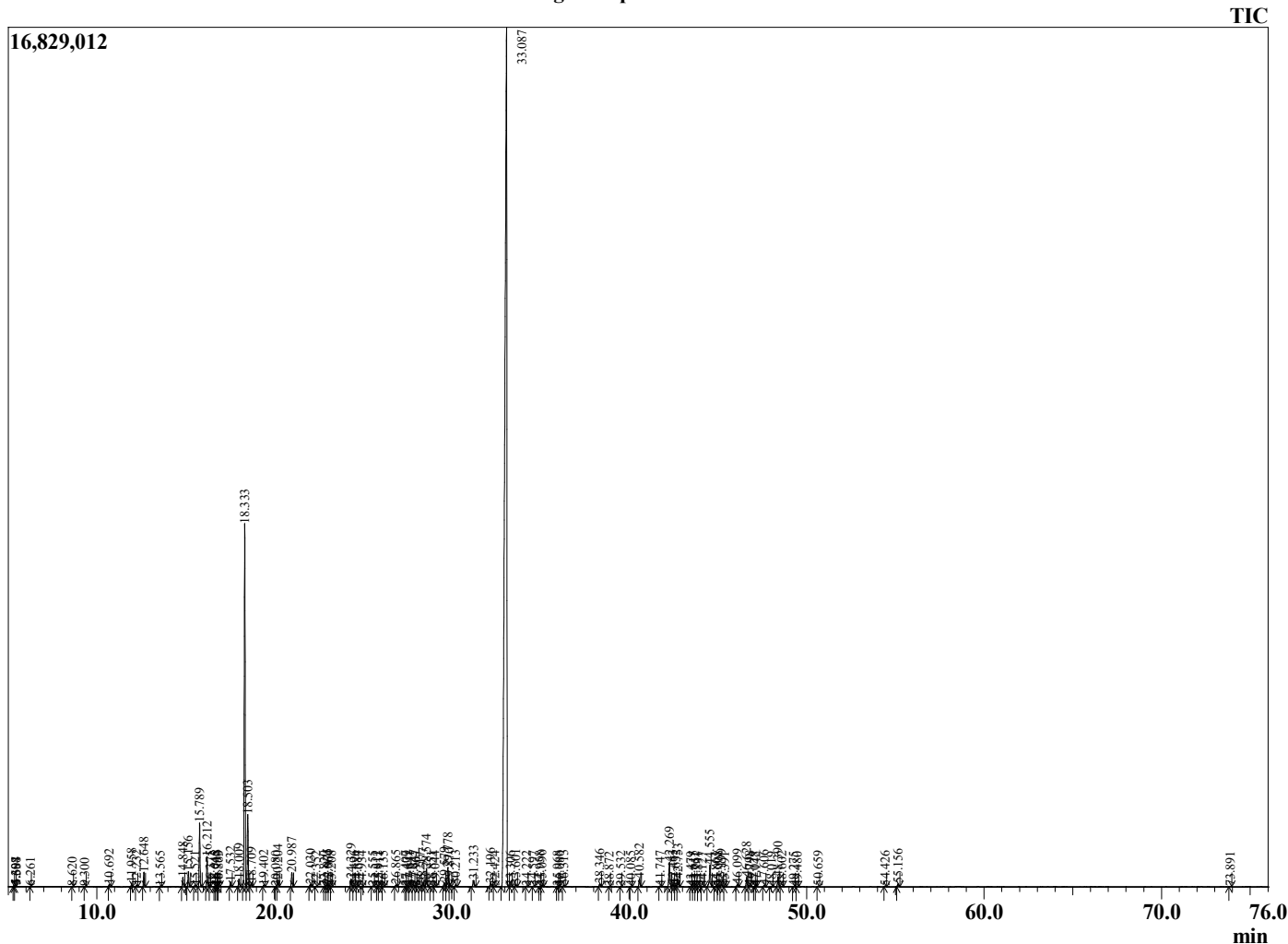
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 10/10/2022 6:52:02 PM
 Sample Type : Essential Oil
 Sample Name : Spearmint Oil - Revive
 Sample ID : 0E
 Injection Volume : 0.10
 Instrument ID: : GC-3



Peak Report TIC

R.Time	Name	Area%
3.812	Isobutyl alcohol	0.01
4.129	3-Methylbutanal	0.04
4.239	2-Methylbutanal	0.03
4.694	2-Ethylfuran	0.01
5.307	1-Pentanol	0.02
5.388	2-Methyl butanol	0.02
6.261	Methyl 2-methylbutyrate	0.01
8.620	Ethyl 2-methylbutyrate	0.01
9.300	Hex-(2E)-enol	0.00
10.692	2,5-Diethyltetrahydrofuran	0.06
11.958	Hashishene	0.10
12.232	alpha-Thujene	0.04
12.648	alpha-Pinene	0.43
13.565	Camphene	0.02
14.848	Sabinene	0.31
15.156	beta-Pinene	0.51
15.521	3-Octanone	0.04
15.789	Myrcene	2.05
16.212	Octan-3-ol	0.99
16.375	Unidentified	0.01
16.645	Octanal	0.01
16.718	Pseudolimonene	0.04
16.790	Menthatriene analogue	0.01
16.863	alpha-Phellandrene	0.01
17.532	alpha-Terpinene	0.17
18.009	para-Cymene	0.28
18.333	Limonene	13.21
18.503	1,8-cineole	2.52
18.709	(Z)-beta-Ocimene	0.14
19.402	(E)-beta-Ocimene	0.05
20.080	Unidentified	0.01
20.204	gamma-Terpinene	0.25
20.987	trans-Sabinene hydrate	0.53
22.030	Terpinolene	0.08
22.352	para-Cymenene	0.02
22.820	Nonan-3-ol	0.00
22.975	Linalool	0.08
23.064	cis-Sabinene hydrate	0.05
23.208	2-Methylbutyl-2-methylbutyrate	0.01
24.329	3-Octyl acetate	0.30
24.496	trans-para-Mentha-2,8-dienol	0.02
24.684	cis-para-Menth-2-en-1-ol	0.03
24.934	Unidentified	0.02
25.555	cis-Limonene oxide	0.03
25.812	trans-Pinocarveol	0.02
25.911	cis-para-Menth-2-en-1-ol	0.05
26.135	trans-Verbenol	0.02
26.865	Menthone	0.08
27.407	Unidentified	0.01
27.479	Isomenthone	0.02
27.641	para-Mentha-1,5-dien-8-ol	0.03
27.847	delta-Terpineol	0.07
27.967	Borneol	0.02
28.217	Undecatriene isomer	0.01
28.377	Menthol	0.14
28.574	Terpinen-4-ol	0.69
28.851	Unidentified	0.02
29.044	trans-Isocarveol	0.02
29.579	alpha-Terpineol	0.18
29.778	(Z)-Dihydrocarvone	0.86
29.870	trans-Dihydrocarveol	0.11
30.213	(E)-Dihydrocarvone	0.08

Chromatogram Spearmint Oil - Revive



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.

R.Time	Name	Area%
31.233	trans-Carveol	0.30
32.196	cis-Carveol	0.15
32.424	cis-3-Hexenyl isovalerate	0.03
33.087	Carvone	69.62
33.306	Carvotanacetone	0.03
33.601	Piperitone	0.09
34.222	cis-Carvone oxide	0.02
34.597	Unidentified	0.02
34.958	Unidentified	0.01
35.090	trans-Carvone oxide	0.06
35.968	Unidentified	0.03
36.080	Menthyl acetate	0.01
36.313	Unidentified	0.05
38.346	Dihydrocarvyl acetate	0.12
38.872	trans-Carvyl acetate	0.01
39.532	Myrcen-8-yl acetate	0.01
40.085	Eugenol	0.02
40.582	cis-Carvyl acetate	0.34
41.747	alpha-Copaene	0.03
42.269	beta-Bourbonene	1.06
42.463	alpha-Bourbonene	0.08
42.632	beta-Elementene	0.06
42.753	(Z)-Jasmone	0.33
43.479	Unidentified	0.01
43.615	Unidentified	0.01
43.751	Unidentified	0.01
43.891	Unidentified	0.01
44.127	Unidentified	0.01
44.555	trans-beta-Caryophyllene	1.04
44.863	Unidentified	0.01
45.008	Unidentified	0.01
45.199	beta-Copaene	0.10
45.391	Octyl 2-methylbutyrate	0.01
46.099	Isogermaacrene D	0.09
46.628	(E)-beta-Farnesene	0.41
46.798	alpha-Humulene	0.05
47.078	Unidentified	0.01
47.142	Unidentified	0.01
47.606	cis-Cadinal(6),4-diene	0.07
48.019	trans-Cadinal(6),4-diene	0.01
48.390	Germaacrene D	0.42
48.602	Phenethyl 2-methylbutyrate	0.02
49.275	Bicyclogermaacrene	0.01
49.480	Unidentified	0.01
50.659	delta-Cadinene	0.03
54.426	Caryophyllene oxide	0.03
55.156	Viridiflorol	0.13
73.891	meta-Camphorene	0.01
		100.00