

Sample Information

Analyzed by : Dr. Robert S. Pappas
 Analyzed : 2/15/2019 9:22:08 PM
 Sample Type : Essential Oil
 Sample Name : Spearmint - Barefut
 Sample ID : 0105
 Injection Volume : 0.10
 Instrument ID : GC-4

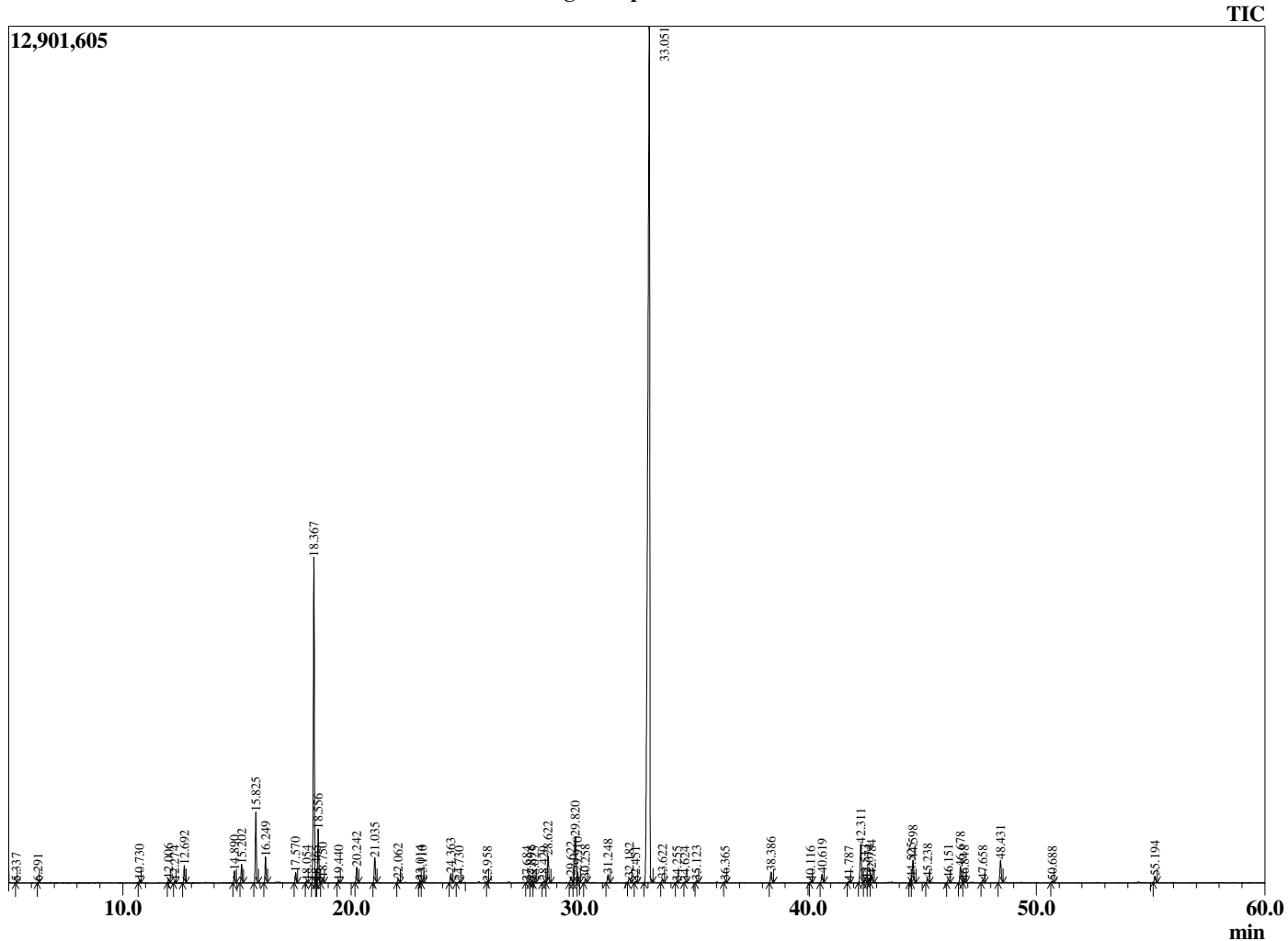


Peak Report TIC

R.Time	Name	Area%
5.337	1-Pentanol	0.02
6.291	Methyl 2-methylbutyrate	0.02
10.730	2,5-Diethyltetrahydrofuran	0.10
12.006	Hashishene	0.15
12.274	alpha-Thujene	0.06
12.692	alpha-Pinene	0.62
14.890	Sabinene	0.47
15.202	beta-Pinene	0.71
15.825	Myrcene	2.67
16.249	3-Octanol	0.98
17.570	alpha-Terpinene	0.42
18.054	para-Cymene	0.09
18.367	Limonene	13.24
18.465	beta-Phellandrene	0.07
18.556	1,8-cineole	2.22
18.750	cis-beta-Ocimene	0.21
19.440	trans-beta-Ocimene	0.09
20.242	gamma-Terpinene	0.66
21.035	trans-Sabinene hydrate	1.09
22.062	Terpinolene	0.18
23.014	Linalool	0.09
23.110	cis-Sabinene hydrate	0.10
24.363	3-Octyl acetate	0.44
24.730	cis-para-Menth-2-en-1-ol	0.06
25.958	trans-para-Menth-2-en-1-ol	0.03
27.684	para-Mentha-1,5-dien-8-ol	0.04
27.896	delta-Terpineol	0.08
28.025	Borneol	0.05
28.429	Menthol	0.08
28.622	Terpinen-4-ol	1.25
29.622	alpha-Terpineol	0.32
29.820	cis-Dihydrocarvone	2.63
29.910	Dihydrocarveol	0.40
30.258	trans-Dihydrocarvone	0.16
31.248	trans-Carveol	0.41
32.182	cis-Carveol	0.25
32.451	3-cis-Hexenyl isovalerate	0.06
33.051	Carvone	60.94
33.622	Piperitone	0.16
34.255	Unidentified	0.04
34.624	Unidentified	0.04
35.123	Unidentified	0.09
36.365	Dihydroedulan I	0.07
38.386	Dihydroedulan II	0.55
40.116	Eugenol	0.04
40.619	trans-Carveyl acetate	0.44
41.787	alpha-Copaene	0.06
42.311	beta-Bourbonene	2.07
42.513	alpha-Bourbonene	0.15
42.674	beta-Elemene	0.13
42.784	(Z)-Jasmone	0.36
44.525	beta-Ylangene	0.18
44.598	beta-Caryophyllene	1.27
45.238	beta-Copaene	0.21
46.151	Unidentified	0.19
46.678	trans-beta-Farnesene	0.77
46.848	alpha-Humulene	0.09
47.658	Unidentified	0.13
48.431	Germacrene D	1.15
50.688	delta-Cadinene	0.06
55.194	Viridiflorol	0.33
		100.00

This report is valid for 1 year from the analyzed date.

Chromatogram Spearmint - Barefut



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.