

Sample Information

Analyzed by : Dr. Robert S. Pappas  
 Analyzed : 10/4/2018 12:00:49 PM  
 Sample Type : Essential Oil  
 Sample Name : Spearmint  
 Sample ID : B0418F  
 Injection Volume : 0.10  
 Instrument ID : GC-2

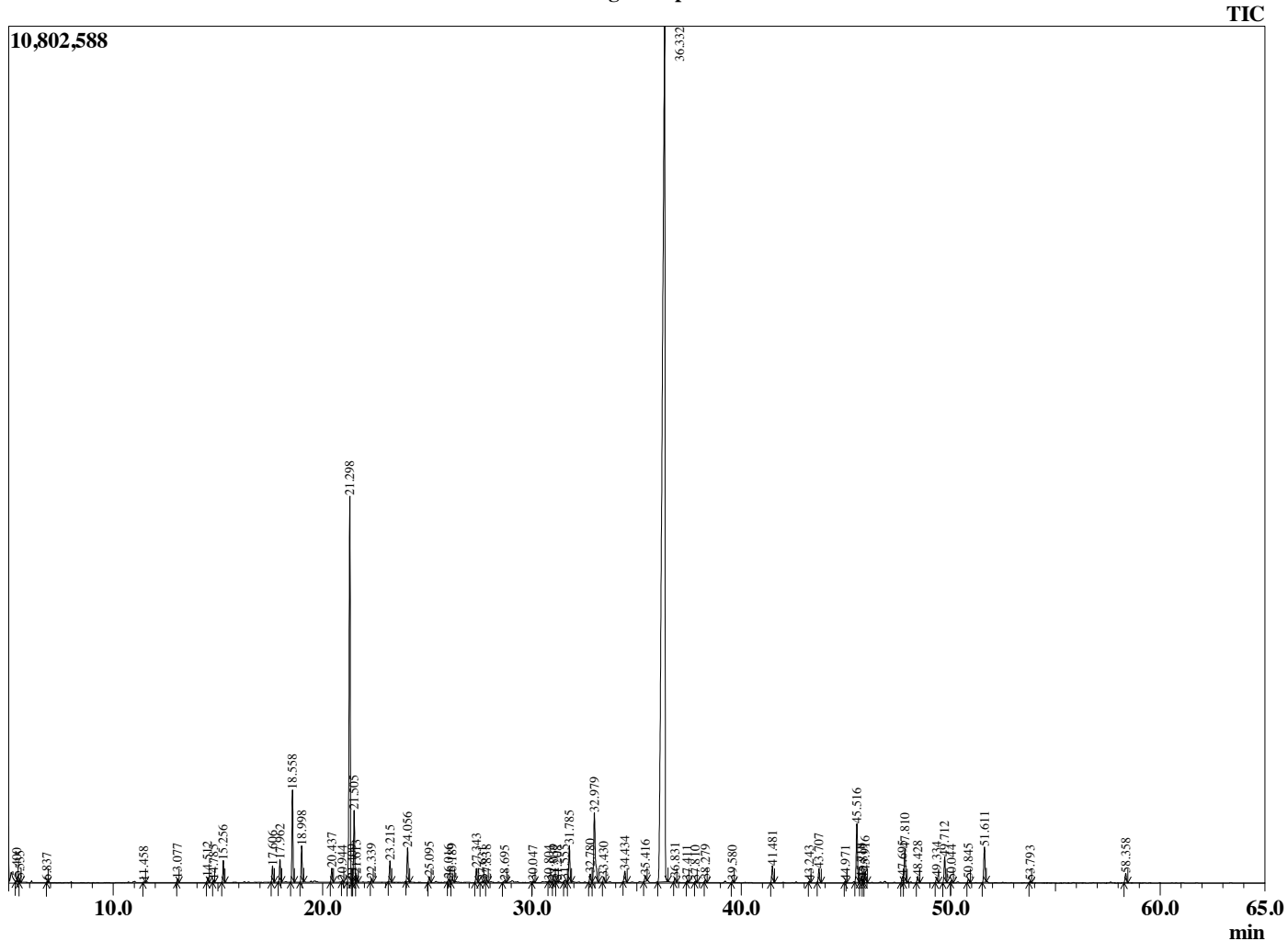


Peak Report TIC

R.Time	Name	Area%
5.400	3-Methylbutanal	0.08
5.535	2-Methylbutanal	0.04
6.837	3-Methylbutanol	0.02
11.458	E-2-Hexenol	0.02
13.077	2,5-Diethyltetrahydrofuran	0.09
14.512	Hashishene	0.13
14.785	alpha-Thujene	0.05
15.256	alpha-Pinene	0.55
17.606	Sabinene	0.43
17.962	beta-Pinene	0.62
18.558	Myrcene	2.52
18.998	3-Octanol	0.99
20.437	alpha-Terpinene	0.39
20.944	para-Cymene	0.04
21.298	Limonene	12.03
21.409	beta-Phellandrene	0.06
21.505	1,8-Cineole	2.02
21.613	Z-beta-Ocimene	0.20
22.339	E-beta-Ocimene	0.09
23.215	gamma-Terpinene	0.62
24.056	trans-Sabinene hydrate	1.01
25.095	Terpinolene	0.17
26.016	Linalool	0.09
26.189	cis-Sabinene hydrate	0.12
27.343	3-Octyl acetate	0.42
27.631	trans-p-Mentha-2,8-dienol	0.03
27.838	cis-p-Menth-2-en-1-ol	0.06
28.695	trans-Limonene oxide	0.07
30.047	Menthone	0.04
30.804	p-Mentha-1,5-dien-8-ol	0.04
31.039	Terpineol isomer	0.07
31.208	Borneol	0.03
31.555	Menthol	0.08
31.785	Terpinen-4-ol	1.17
32.780	alpha-Terpineol	0.30
32.979	Z-Dihydrocarvone	3.04
33.430	E-Dihydrocarvone	0.17
34.434	trans-Carveol	0.40
35.416	cis-Carveol	0.21
36.332	Carvone	62.90
36.831	Piperitone	0.13
37.411	Carvone oxide	0.04
37.810	iso-Piperitenone	0.04
38.279	Unidentified	0.08
39.580	Dihydroedulan I	0.07
41.481	trans-Dihydrocarvyl acetate	0.56
43.243	Eugenol	0.04
43.707	cis-Carvyl acetate	0.45
44.971	alpha-Copaene	0.05
45.516	beta-Bourbonene	1.98
45.718	alpha-Bourbonene	0.14
45.819	beta-Elemene	0.11
45.916	Z-Jasmone	0.38
47.695	beta-Ylangene	0.21
47.810	beta-Caryophyllene	1.19
48.428	beta-Copaene	0.22
49.334	Sesquiterpene	0.19
49.712	E-beta-Farnesene	0.88
50.044	alpha-Humulene	0.08
50.845	trans-Cadina-1(6),4-diene	0.13
51.611	Germacrene D	1.22
53.793	delta-Cadinene	0.05

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

Chromatogram Spearmint



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.

R.Time Name  
58.358 Viridiflorol

Area%  
0.34  
100.00