

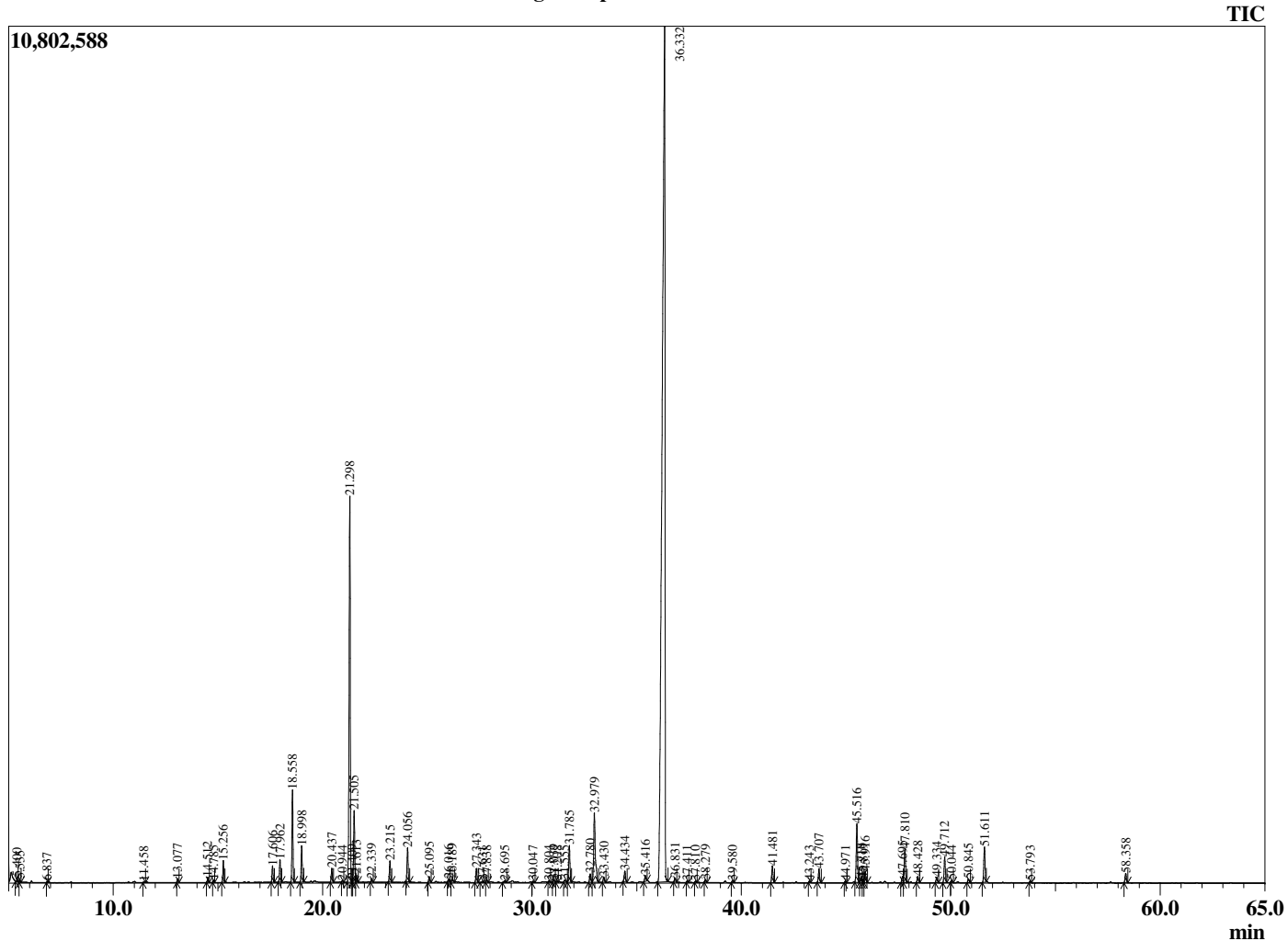
Sample Information

Analyzed by : Dr. Robert S. Pappas
 Analyzed : 12/7/2018 11:00:49 AM
 Sample Type : Essential Oil
 Sample Name : Spearmint - Edens Garden
 Sample ID : AH05LB
 Injection Volume : 0.10
 Instrument ID : GC-2



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

Chromatogram Spearmint - Edens Garden



R.Time	Name	Peak Report TIC	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-Caryyl 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
58.358	Viridiflorol		0.34
			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.