

Sample Information

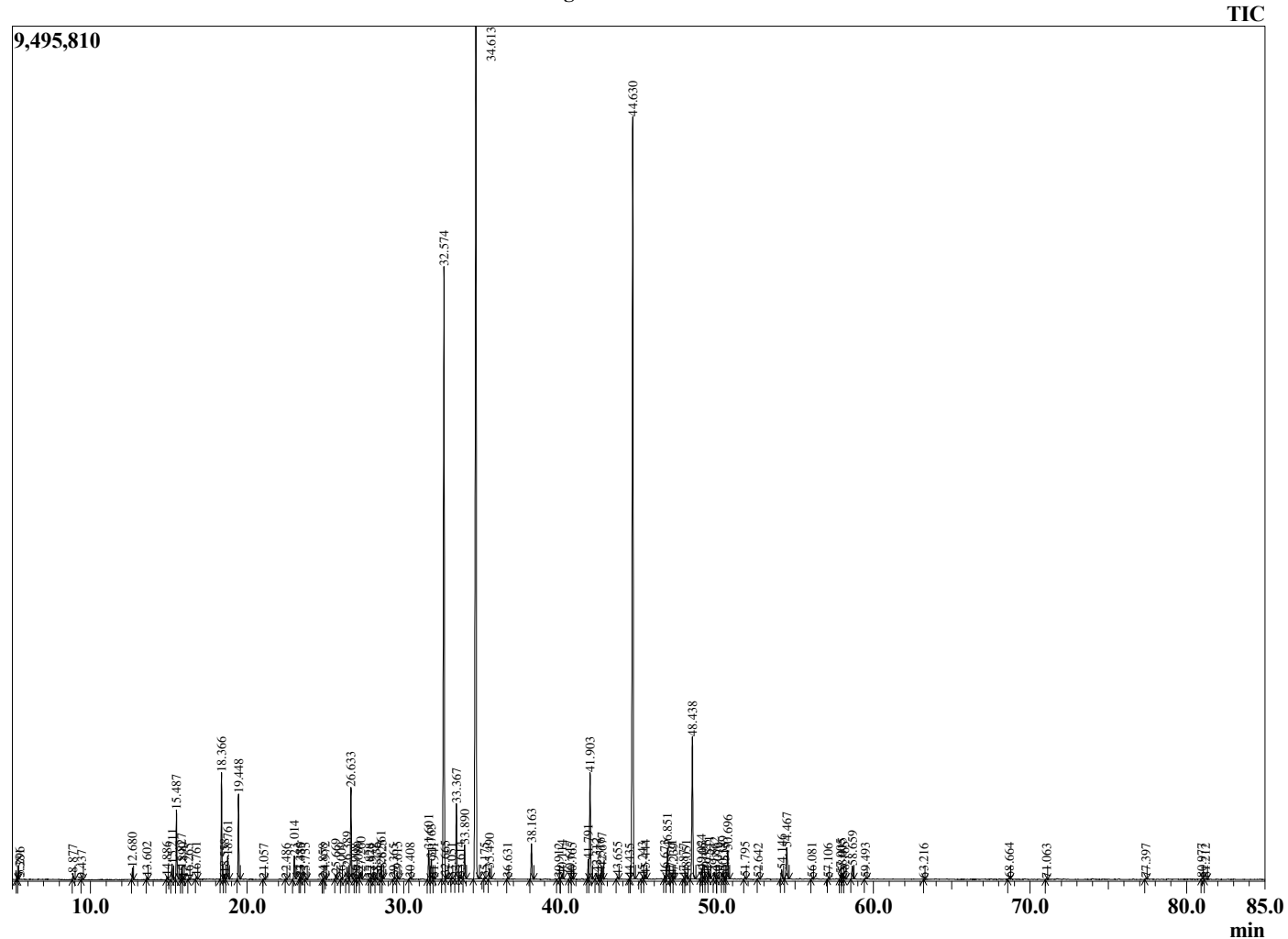
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 6/25/2021 12:59:41 AM
 Sample Type : Essential Oil
 Sample Name : Melissa Oil - Barefut
 Sample ID : 0105
 Injection Volume : 0.10
 Instrument ID : GC-3



Peak Report TIC

R.Time	Name	Area%
3.672	3-Methyl-1-butene-3-ol	0.02
4.115	3-Methylbutanal	0.08
4.224	2-Methylbutanal	0.03
5.296	1-Pentanol	0.05
5.381	2-Methyl butanol	0.02
8.877	Hex-(3Z)-enol	0.13
9.437	Hexanol	0.03
12.680	alpha-Pinene	0.22
13.602	Camphene	0.05
14.886	Sabinene	0.07
15.211	beta-Pinene + 1-Octen-3-ol	0.36
15.487	6-Methyl-hept-5-en-2-one	1.60
15.827	Myrcene	0.24
15.890	Unidentified	0.03
16.265	3-Octanol	0.02
16.761	Hex-3(Z)-enyl acetate	0.06
18.366	Limonene	2.40
18.558	1,8-Cineole	0.14
18.761	(Z)-beta-Ocimene	0.56
19.448	(E)-beta-Ocimene	1.89
21.057	cis-Linalool oxide (furanoid)	0.03
22.486	Rosefuran	0.02
23.014	Linalool	0.58
23.380	Nonanal	0.05
23.435	alpha-Pinene oxide	0.04
23.733	cis-Rose oxide	0.03
24.858	trans-Rose oxide	0.02
24.972	allo-Ocimene	0.08
25.669	Epiphocitral A	0.11
26.009	exo-Isocitral	0.03
26.389	trans-Chrysanthamal	0.32
26.633	Citronellal	2.39
26.908	Menthone	0.02
27.089	Isopulegol	0.06
27.260	Isoneral	0.18
27.828	Rose furan oxide	0.02
27.979	Unidentified	0.03
28.236	Unidentified	0.04
28.561	Isogeranial	0.36
28.625	Unidentified	0.07
29.365	Methyl salicylate	0.02
29.615	alpha-Terpineol	0.08
30.408	Unidentified	0.05
31.601	Nerol	0.80
31.763	Citronellol	0.57
31.941	Isogeraniol	0.04
32.574	Neral	17.35
32.665	Unidentified	0.07
33.051	Unidentified	0.02
33.367	Geraniol	1.99
33.614	Piperitone	0.05
33.890	Methyl citronellate	0.93
34.613	Geranial	26.72
35.175	Methyl nerate	0.03
35.490	trans-Carvone oxide	0.27
36.631	Geranyl formate	0.04
38.163	Methyl geranate	0.96
39.912	alpha-Cubebene	0.02
40.114	Eugenol	0.13
40.617	Neryl acetate	0.09
40.765	Unidentified	0.04
41.791	alpha-Copaene	0.55

Chromatogram Melissa Oil - Barefut



Comments:

The analysis of this Melissa batch sample meets the expected chemical profile for authentic essential oil of *Melissa officinalis*. 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%
41.903	Geranyl acetate	3.01
42.312	beta-Bourbonene	0.17
42.576	beta-Cubebene	0.18
42.677	beta-Elemene	0.31
43.655	cis-beta-Caryophyllene	0.08
44.435	Unidentified	0.02
44.630	trans-beta-Caryophyllene	22.79
45.243	beta-Copaene	0.06
45.444	trans-alpha-Bergamotene	0.11
46.673	(E)-beta-Farnesene	0.10
46.851	alpha-Humulene	0.90
47.121	Alloaromodendrene	0.12
47.239	Unidentified	0.02
47.877	cis-Cadina-1(6),4-diene	0.02
48.051	trans-Cadina-1(6),4-diene	0.13
48.438	Germacrene D	4.22
49.024	(Z,E)-alpha-Farnesene	0.27
49.105	trans-Murrola-4(14),5-diene	0.03
49.323	Bicyclogermacrene	0.14
49.511	alpha-Murolene	0.22
49.862	(E,E)-alpha-Farnesene	0.19
50.076	beta-Bisabolene	0.06
50.389	gamma-Cadinene	0.22
50.513	Cubebol	0.02
50.696	delta-Cadinene	0.84
51.795	alpha-Cadinene	0.06
52.642	Unidentified	0.03
54.146	Germacren D-4-ol	0.28
54.467	Caryophyllene oxide	1.04
56.081	Humulene epoxide II	0.04
57.106	Epicubenol	0.02
57.905	tau-Cadinol	0.15
58.015	epi-alpha-Cadinol	0.20
58.165	delta-Cadinol	0.07
58.659	alpha-Cadinol	0.40
59.493	Unidentified	0.03
63.216	Mintsulfide	0.01
68.664	Phytone	0.05
71.063	Unidentified	0.02
77.397	Unidentified	0.03
80.977	Unidentified	0.02
81.212	Unidentified	0.03
		100.00