

Sample Information

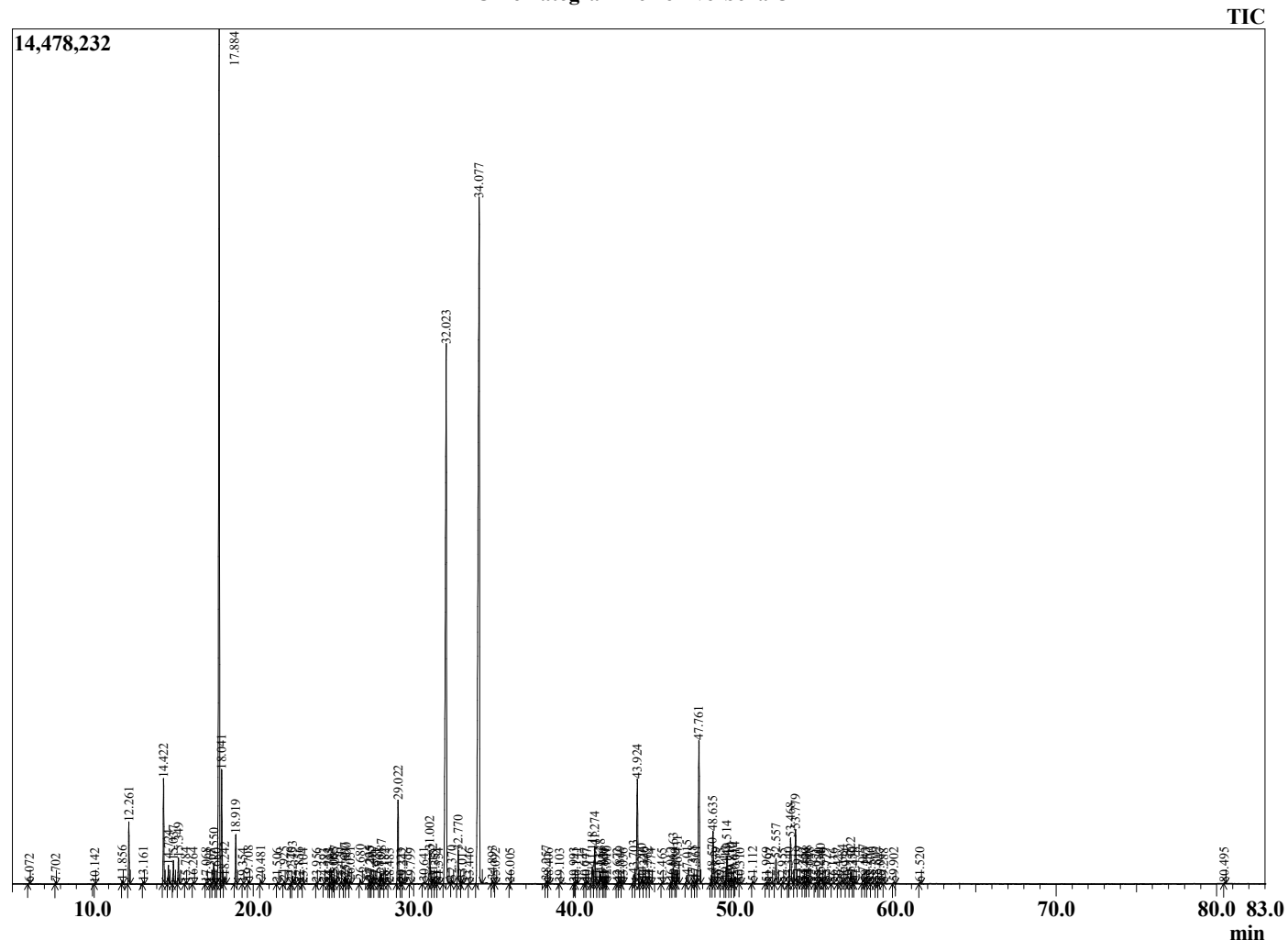
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 11/11/2022 5:36:49 PM
 Sample Type : Essential Oil
 Sample Name : Lemon Verbena Oil - Revive
 Sample ID : 0E
 Injection Volume : 0.10
 Instrument ID: : GC-4



Peak Report TIC

R.Time	Name	Area%
3.617	2-Methyl-3-buten-2-ol	0.01
6.072	Methyl 2-methylbutyrate	0.02
7.702	cis-Salvene	0.03
10.142	Unidentified	0.01
11.856	alpha-Thujene	0.06
12.261	alpha-Pinene	1.11
13.161	Camphene	0.04
14.422	Sabinene	2.06
14.724	beta-Pinene	0.39
15.037	6-Methyl hept-5-en-2-one	0.46
15.349	Myrcene	0.54
15.784	3-Octanol	0.02
16.264	Pseudolimonene	0.04
17.068	alpha-Terpinene	0.03
17.363	Unidentified	0.01
17.550	para-Cymene	0.48
17.680	Methyl octyl ether	0.02
17.884	Limonene	20.14
18.041	1,8-Cineole	2.32
18.242	(Z)-beta-Ocimene	0.16
18.919	(E)-beta-Ocimene	1.07
19.354	Melonol	0.01
19.708	gamma-Terpinene	0.07
20.481	trans-4-Thujanol	0.08
21.506	Terpinolene	0.02
21.925	Rosefuran	0.06
22.370	Perillene	0.03
22.453	Linalool	0.20
22.856	alpha-Pinene oxide	0.03
23.104	Unidentified	0.01
23.956	trans-para-Mentha-2,8-dienol	0.02
24.393	allo-Ocimene	0.01
24.712	cis-Limonene oxide	0.02
24.795	Unidentified	0.01
25.005	trans-Limonene oxide	0.06
25.087	Epiphocitral A	0.09
25.430	exo-Isocitral	0.02
25.697	Camphor	0.15
25.800	trans-Chrysanthemal	0.14
26.051	Citronellal	0.07
26.680	Isoneral	0.10
27.235	Isoborneol	0.10
27.295	delta-Terpineol	0.03
27.407	Borneol	0.08
27.631	Unidentified	0.02
27.867	Unidentified	0.01
27.987	Isogeranial	0.31
28.182	Unidentified	0.01
28.483	trans-Isocarveol	0.02
29.022	alpha-Terpineol	2.14
29.223	cis-Dihydrocarvone	0.02
29.342	Unidentified	0.04
29.799	Unidentified	0.02
30.641	trans-Carveol	0.04
31.002	Nerol	0.86
31.182	Citronellol	0.16
31.351	Isogeraniol	0.06
31.554	cis-Carveol	0.03
32.023	Neral	17.79
32.370	Carvone	0.07
32.770	Geraniol	0.89
33.012	Piperitone	0.07

Chromatogram Lemon Verbena Oil



Comments:

The analysis of this Lemon Verbena batch sample meets the expected chemical profile for authentic essential oil of *Lippia citriodora*. 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%
33.446	Unidentified	0.01
34.077	Geranial	26.82
34.893	trans-Carvone oxide	0.09
35.092	Bornyl acetate	0.01
36.005	Carvacrol	0.02
38.257	delta-Elemene	0.09
38.406	Unidentified	0.02
39.103	Unidentified	0.01
39.993	Neryl acetate	0.03
40.141	Unidentified	0.03
40.647	Cyclosativene	0.02
40.777	Unidentified	0.02
41.118	alpha-Copaene	0.47
41.274	Geranyl acetate	0.96
41.532	2-epi-alpha-Funebrene	0.04
41.638	beta-Bourbonene	0.31
41.820	alpha-Bourbonene	0.02
41.901	Unidentified	0.04
42.010	beta-Elemene	0.06
42.672	Unidentified	0.02
42.849	alpha-Funebrene	0.07
43.036	Italicene	0.04
43.703	alpha-Cedrene	0.27
43.924	trans-beta-Caryophyllene	3.10
44.200	beta-Cedrene	0.14
44.330	Unidentified	0.05
44.562	beta-Copaene	0.06
44.774	trans-alpha-Bergamotene	0.02
45.465	Isogermacrene D	0.02
46.012	trans-beta-Farnesene	0.04
46.163	alpha-Humulene	0.46
46.289	Unidentified	0.01
46.431	Alloaromodendrene	0.37
47.015	Neryl propionate	0.25
47.378	gamma-Murolene	0.09
47.561	gamma-Curcumene	0.07
47.761	alpha-Curcumene	4.15
48.570	alpha-Zingiberene	0.21
48.635	Bicyclogermacrene	1.55
48.839	alpha-Murolene	0.04
49.115	Unidentified	0.02
49.412	beta-Bisabolene	0.08
49.514	beta-Curcumene	0.76
49.710	gamma-Cadinene	0.17
49.830	Cubebol	0.17
50.014	delta-Cadinene	0.20
50.310	Unidentified	0.02
51.112	alpha-Cadinene	0.05
51.969	Unidentified	0.05
52.197	Unidentified	0.03
52.557	(E)-Nerolidol	0.68
52.955	Unidentified	0.02
53.340	Unidentified	0.03
53.468	Spathulenol	1.40
53.779	Caryophyllene oxide	1.67
53.919	Unidentified	0.06
54.252	Unidentified	0.04
54.400	Unidentified	0.01
54.508	Unidentified	0.08
54.648	epi-Cedrol	0.02
55.071	Unidentified	0.03
55.230	Unidentified	0.01
55.340	Cedrol	0.20

R.Time	Name	Area%
55.579	Unidentified	0.02
55.727	1-,10-di-epi-Cubenol	0.05
56.116	Unidentified	0.02
56.427	Epicubenol	0.02
56.684	Unidentified	0.11
56.934	Caryophylla-4(12),8(13)-dien-5-beta-ol	0.02
57.222	alpha-Muurolol	0.35
57.330	Unidentified	0.03
57.478	Unidentified	0.04
57.977	alpha-Cadinol	0.11
58.143	Unidentified	0.03
58.257	alpha-Eudesmol	0.04
58.500	Unidentified	0.03
58.802	Unidentified	0.06
59.047	Unidentified	0.05
59.288	Unidentified	0.01
59.902	Unidentified	0.06
61.520	Unidentified	0.03
80.495	Unidentified	0.02
		100.00