

Sample Information

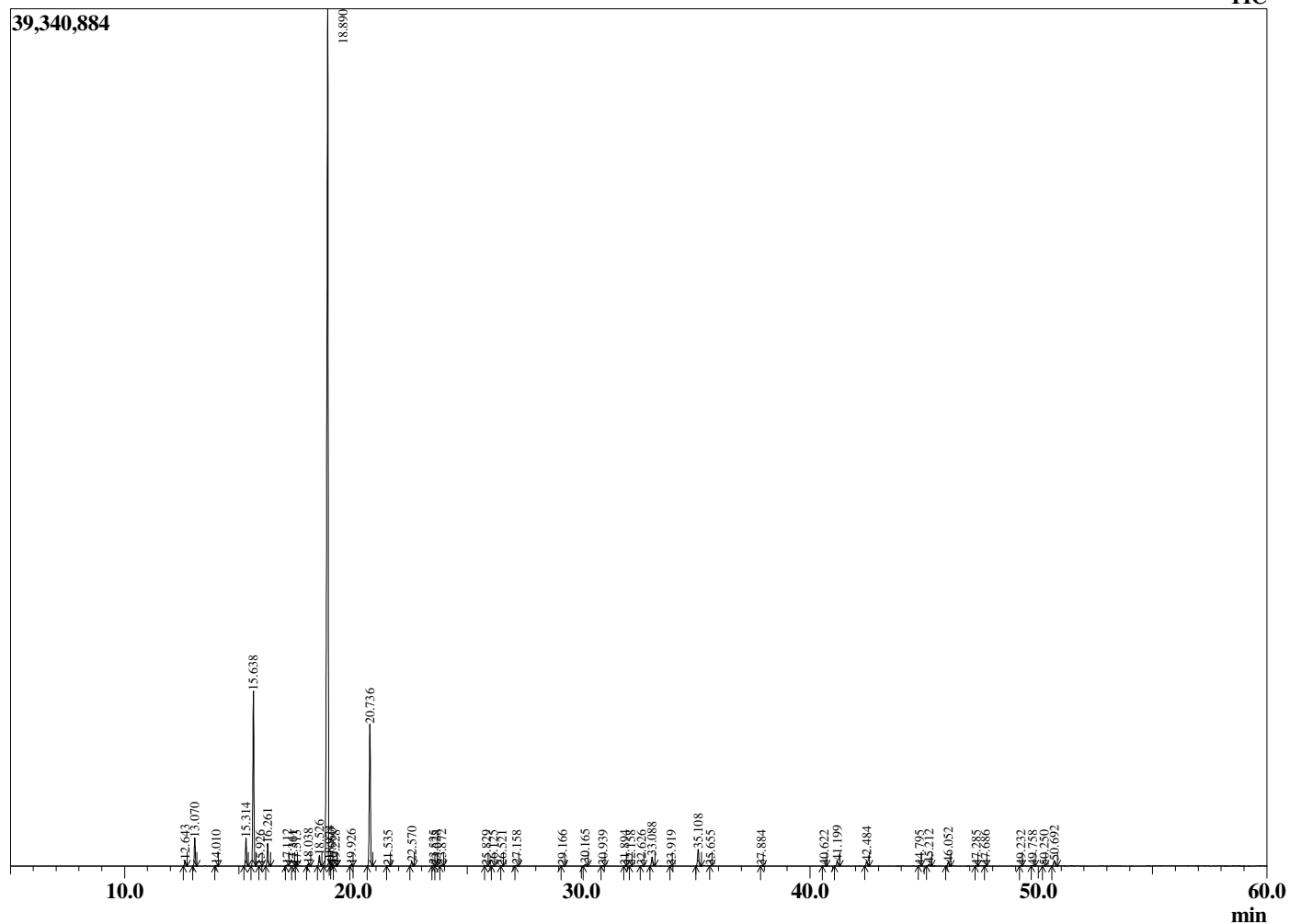
Analyzed by : Dr. Robert S. Pappas  
 Analyzed : 2/3/2020 10:22:01 PM  
 Sample Type : Essential Oil  
 Sample Name : Lemon - Barefut  
 Sample ID : 0111  
 Injection Volume : 0.10  
 Instrument ID : GC-3



Peak Report TIC

R.Time	Name	Area%
12.643	alpha-Thujene	0.34
13.070	alpha-Pinene	1.61
14.010	Camphene	0.05
15.314	Sabinene	1.71
15.638	beta-Pinene	11.06
15.926	6-Methyl hept-5-en-2-one	0.02
16.261	Myrcene	1.36
17.112	Octanal	0.07
17.361	alpha-Phellandrene	0.03
17.513	delta-3-Carene	0.00
18.038	alpha-Terpinene	0.15
18.526	para-Cymene	0.74
18.890	Limonene	68.30
18.974	beta-Phellandrene	0.07
19.060	1,8-Cineole	0.06
19.228	cis-beta-Ocimene	0.05
19.926	trans-beta-Ocimene	0.09
20.736	gamma-Terpinene	9.69
21.535	trans-Sabinene hydrate	0.04
22.570	Terpinolene	0.31
23.525	Linalool	0.07
23.628	cis-Sabinene hydrate	0.03
23.872	Nonanal	0.08
25.829	cis-Limonene oxide	0.03
26.125	trans-Limonene oxide	0.02
26.521	Unidentified	0.01
27.158	Citronellal	0.06
29.166	Terpinen-4-ol	0.02
30.165	alpha-Terpineol	0.14
30.939	Decanal	0.03
31.894	Epoxyneral	0.01
32.158	Nerol	0.02
32.626	Epoxygeranial	0.03
33.088	Neral	0.68
33.919	Geraniol	0.01
35.108	Geranial	1.29
35.655	Perillaldehyde	0.01
37.884	Undecanal	0.01
40.622	Citronellyl acetate	0.03
41.199	Neryl acetate	0.38
42.484	Geranyl acetate	0.33
44.795	cis-alpha-Bergamotene	0.01
45.212	beta-Caryophyllene	0.13
46.052	trans-alpha-Bergamotene	0.29
47.285	trans-beta-Farnesene	0.01
47.686	Unidentified	0.01
49.232	Unidentified	0.01
49.758	Valencene	0.04
50.250	cis-alpha-Bisabolene	0.03
50.692	beta-Bisabolene	0.42
		100.00

Chromatogram Lemon - Barefut



Comments:

The analysis of this Lemon, Italy batch sample meets the expected chemical profile for authentic essential oil of *Citrus limon*. 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.