

Sample Information

Analyzed by : Dr. Robert S. Pappas
 Analyzed : 2/15/2019 5:30:40 PM
 Sample Type : Essential Oil
 Sample Name : Lemon, Italy - Barefut
 Sample ID : 0109
 Injection Volume : 0.10
 Instrument ID : GC-4

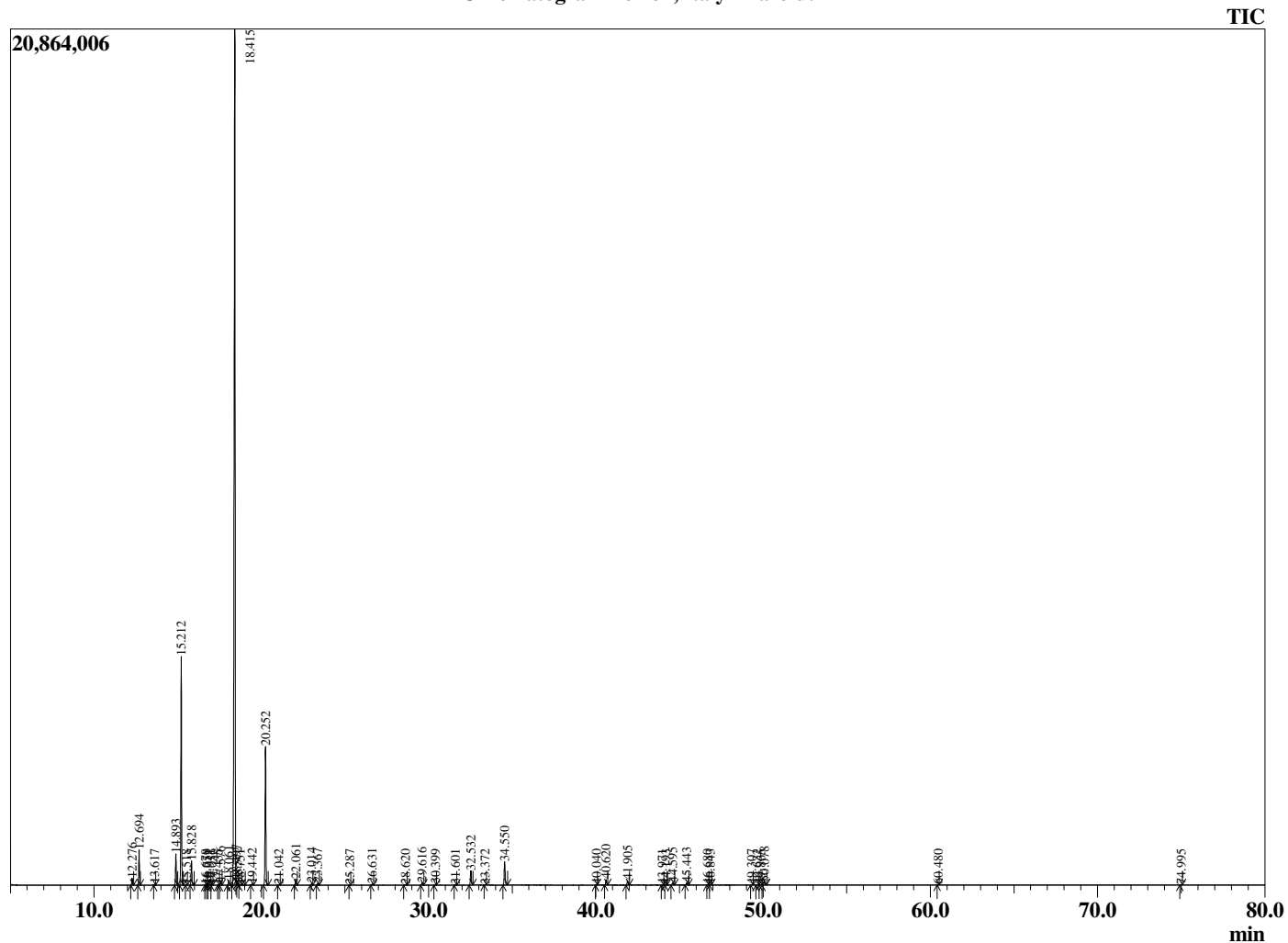


Peak Report TIC

R.Time	Name	Area%
12.276	alpha-Thujene	0.37
12.694	alpha-Pinene	1.85
13.617	Camphene	0.05
14.893	Sabinene	1.79
15.212	beta-Pinene	13.26
15.518	Linalool	0.02
15.828	Myrcene	1.41
16.678	Octanal	0.04
16.759	Pseudolimonene	0.03
16.911	alpha-Phellandrene	0.04
17.056	Unidentified	0.01
17.435	1,4-Cineole	0.01
17.576	alpha-Terpinene	0.20
18.061	para-Cymene	0.31
18.415	Limonene	65.97
18.497	beta-Phellandrene	0.06
18.572	1,8-Cineole	0.08
18.751	cis-beta-Ocimene	0.02
19.442	trans-beta-Ocimene	0.07
20.252	gamma-Terpinene	8.99
21.042	trans-Sabinene hydrate	0.02
22.061	Terpinolene	0.40
23.014	Linalool	0.13
23.367	Nonanal	0.11
25.287	cis-Limonene oxide	0.01
26.631	Citronellal	0.08
28.620	Terpinen-4-ol	0.05
29.616	alpha-Terpineol	0.18
30.399	Decanal	0.06
31.601	Nerol	0.03
32.532	Neral	1.05
33.372	Geraniol	0.02
34.550	Geranial	1.69
40.040	Citronellyl acetate	0.04
40.620	Neryl acetate	0.39
41.905	Geranyl acetate	0.35
43.971	Dodecanal	0.01
44.193	cis-alpha-Bergamotene	0.01
44.595	beta-Caryophyllene	0.22
45.443	trans-alpha-Bergamotene	0.18
46.680	trans-beta-Farnesene	0.01
46.843	alpha-Humulene	0.01
49.307	Bicyclogermacrene	0.02
49.632	cis-alpha-Bisabolene	0.03
49.865	(E,E)-alpha-Farnesene	0.02
50.078	beta-Bisabolene	0.27
60.480	alpha-Bisabolol	0.01
74.995	Citropten	0.01
		100.00

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

Chromatogram Lemon, Italy - 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.