

Sample Information

Analyzed by : Dr. Robert S. Pappas  
 Analyzed : 8/26/2019 10:23:42 PM  
 Sample Type : Essential Oil  
 Sample Name : Lemon, Italy - Barefut  
 Sample ID : 0110  
 Injection Volume : 0.10  
 Instrument ID : GC-4

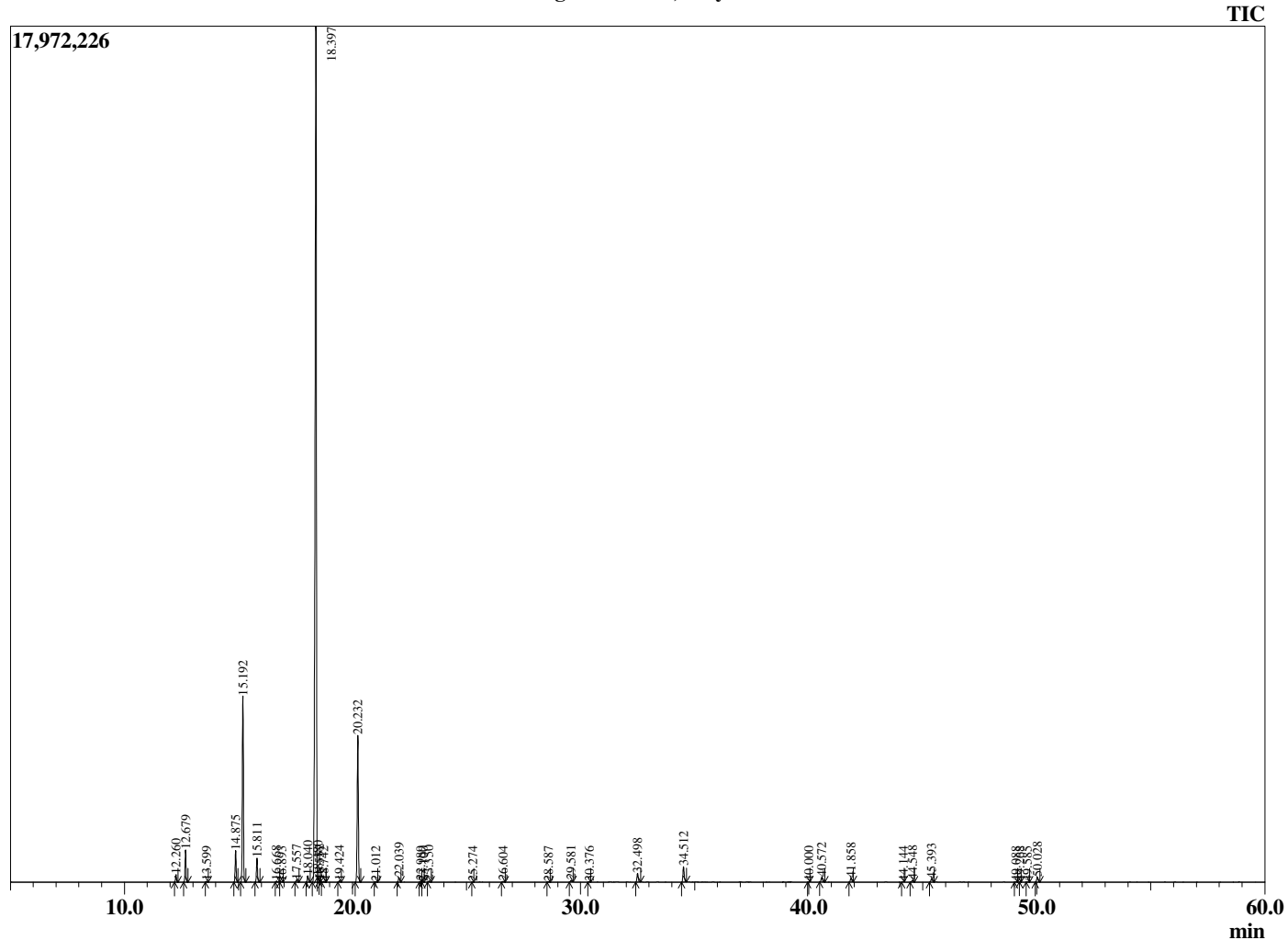


Peak Report TIC

R.Time	Name	Area%
12.260	alpha-Thujene	0.41
12.679	alpha-Pinene	1.80
13.599	Camphene	0.05
14.875	Sabinene	1.86
15.192	beta-Pinene	11.65
15.811	Myrcene	1.43
16.668	Octanal	0.08
16.893	alpha-Phellandrene	0.03
17.557	alpha-Terpinene	0.18
18.040	para-Cymene	0.42
18.397	Limonene	67.83
18.480	beta-Phellandrene	0.08
18.552	1,8-Cineole	0.04
18.742	cis-beta-Ocimene	0.05
19.424	trans-beta-Ocimene	0.09
20.232	gamma-Terpinene	9.81
21.012	trans-Sabinene hydrate	0.03
22.039	Terpinolene	0.33
22.989	Linalool	0.06
23.100	cis-Sabinene hydrate	0.02
23.350	Nonanal	0.08
25.274	Unidentified	0.01
26.604	Citronellal	0.06
28.587	Terpinen-4-ol	0.03
29.581	alpha-Terpineol	0.13
30.376	Decanal	0.03
32.498	Neral	0.67
34.512	Geranial	1.16
40.000	Citronellyl acetate	0.01
40.572	Neryl acetate	0.36
41.858	Geranyl acetate	0.31
44.144	cis-alpha-Bergamotene	0.01
44.548	beta-Caryophyllene	0.14
45.393	trans-alpha-Bergamotene	0.28
49.088	Valencene	0.03
49.268	Bicyclogermacrene	0.01
49.585	cis-alpha-Bisabolene	0.02
50.028	beta-Bisabolene	0.40
		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.