

Sample Information

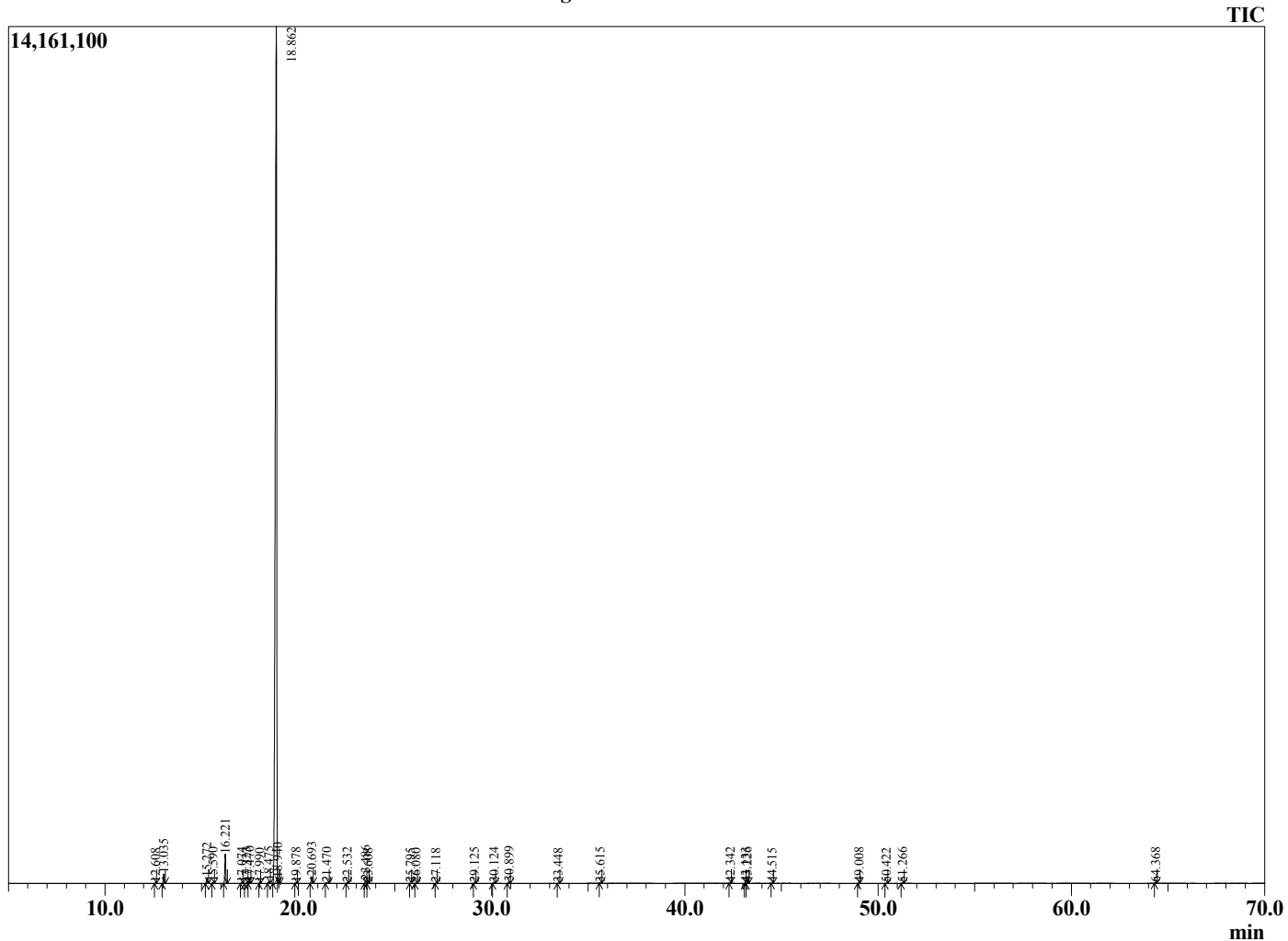
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 4/4/20 2:49:27 AM
 Sample Type : Essential Oil
 Sample Name : Clementine - Barefut
 Sample ID : 0105
 Injection Volume : 0.10
 Instrument ID: : GC-3



Peak Report TIC

R.Time	Name	Area%
12.608	alpha-Thujene	0.02
13.035	alpha-Pinene	0.61
15.272	Sabinene	0.41
15.590	beta-Pinene	0.08
16.221	Myrcene	2.04
17.074	Octanal	0.06
17.323	alpha-Phellandrene	0.05
17.470	delta-3-Carene	0.10
17.990	alpha-Terpinene	0.01
18.475	para-Cymene	0.15
18.862	Limonene	94.80
18.940	beta-Phellandrene	0.06
19.878	trans-beta-Ocimene	0.04
20.693	gamma-Terpinene	0.52
21.470	1-Octanol	0.08
22.532	Terpinolene	0.04
23.486	Linalool	0.23
23.608	Unidentified	0.02
25.795	cis-Limonene oxide	0.02
26.080	trans-Limonene oxide	0.02
27.118	Citronellal	0.01
29.125	Terpinen-4-ol	0.04
30.124	alpha-Terpineol	0.07
30.899	Decanal	0.15
33.448	Carvone	0.02
35.615	Perillaldehyde	0.02
42.342	alpha-Copaene	0.04
43.133	beta-Cubebene	0.04
43.226	beta-Elemene	0.06
44.515	Dodecanal	0.02
49.008	Germacrene D	0.04
50.422	(E,E)-alpha-Farnesene	0.04
51.266	delta-Cadinene	0.05
64.368	alpha-Sinensal	0.03
		100.00

Chromatogram Clementine - Barefut



Comments:

The analysis of this Clementine batch sample meets the expected chemical profile for authentic essential oil of *Citrus reticulata*. 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.