

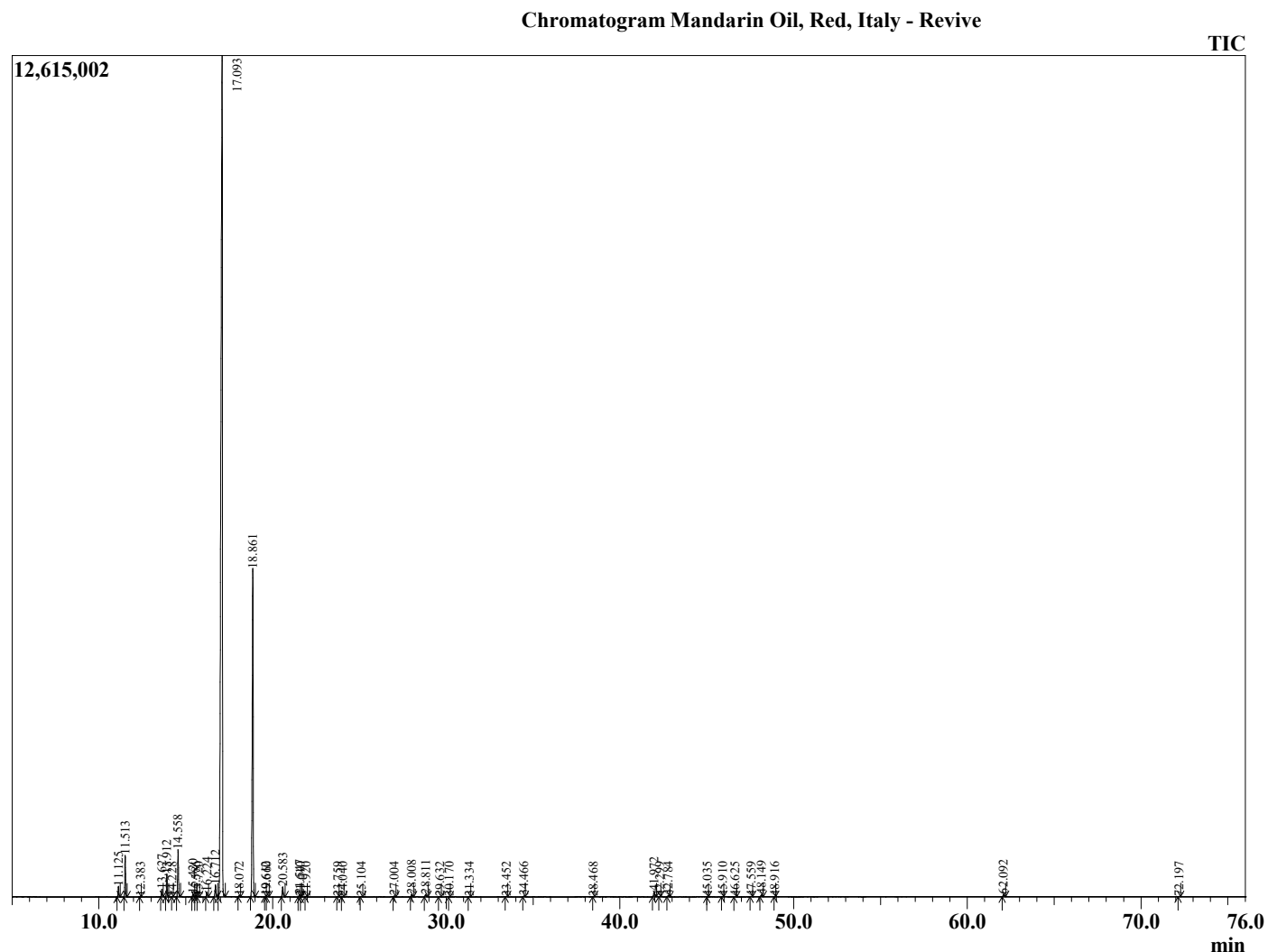
Sample Information

Analyzed by : Dr. Robert S. Pappas
 Analyzed : 6/1/2023 5:52:41 PM
 Sample Type : Essential Oil
 Sample Name : Mandarin Oil, Red, Italy - Revive
 Sample ID : 3E
 Injection Volume : 0.10
 Instrument ID: : GC-2



Peak Report TIC

R.Time	Name	Area%
4.178	trans-3-Penten-2-ol	0.01
11.125	alpha-Thujene	0.45
11.513	alpha-Pinene	1.77
12.383	Camphene	0.02
13.627	Sabinene	0.36
13.912	beta-Pinene	1.05
14.228	Unidentified	0.01
14.558	Myrcene	2.27
15.420	Octanal	0.16
15.586	alpha-Phellandrene	0.06
15.720	delta-3-Carene	0.03
16.224	alpha-Terpinene	0.25
16.712	para-Cymene	0.67
17.093	Limonene	72.24
18.072	trans-beta-Ocimene	0.05
18.861	gamma-Terpinene	18.61
19.612	trans-Sabinene hydrate	0.05
19.660	Pinol	0.06
20.583	Terpinolene	0.53
21.547	Linalool	0.12
21.610	cis-Sabinene hydrate	0.02
21.920	Nonanal	0.02
23.759	cis-Limonene oxide	0.02
24.040	trans-Limonene oxide	0.02
25.104	Citronellal	0.02
27.004	Terpinen-4-ol	0.04
28.008	alpha-Terpineol	0.12
28.811	Decanal	0.14
29.632	cis-Carveol	0.01
30.170	Unidentified	0.01
31.334	Carvone	0.01
33.452	Perillaldehyde	0.02
34.466	Thymol	0.04
38.468	Eugenol	0.01
41.972	Methyl N-methyl anthranilate	0.33
42.299	Dodecanal	0.01
42.784	beta-Caryophyllene	0.07
45.035	alpha-Humulene	0.01
45.910	Unidentified	0.01
46.625	Germacrene D	0.01
47.559	alpha-Selinene	0.03
48.149	trans,trans-alpha-Farnesene	0.12
48.916	delta-Cadinene	0.01
62.092	alpha-Sinensal	0.15
72.197	meta-Camphorene	0.03
		100.00



Comments:

The analysis of this Mandarin, Red batch sample meets the expected chemical profile for authentic essential oil of *Citrus reticulata blanco*. 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.