

Sample Information

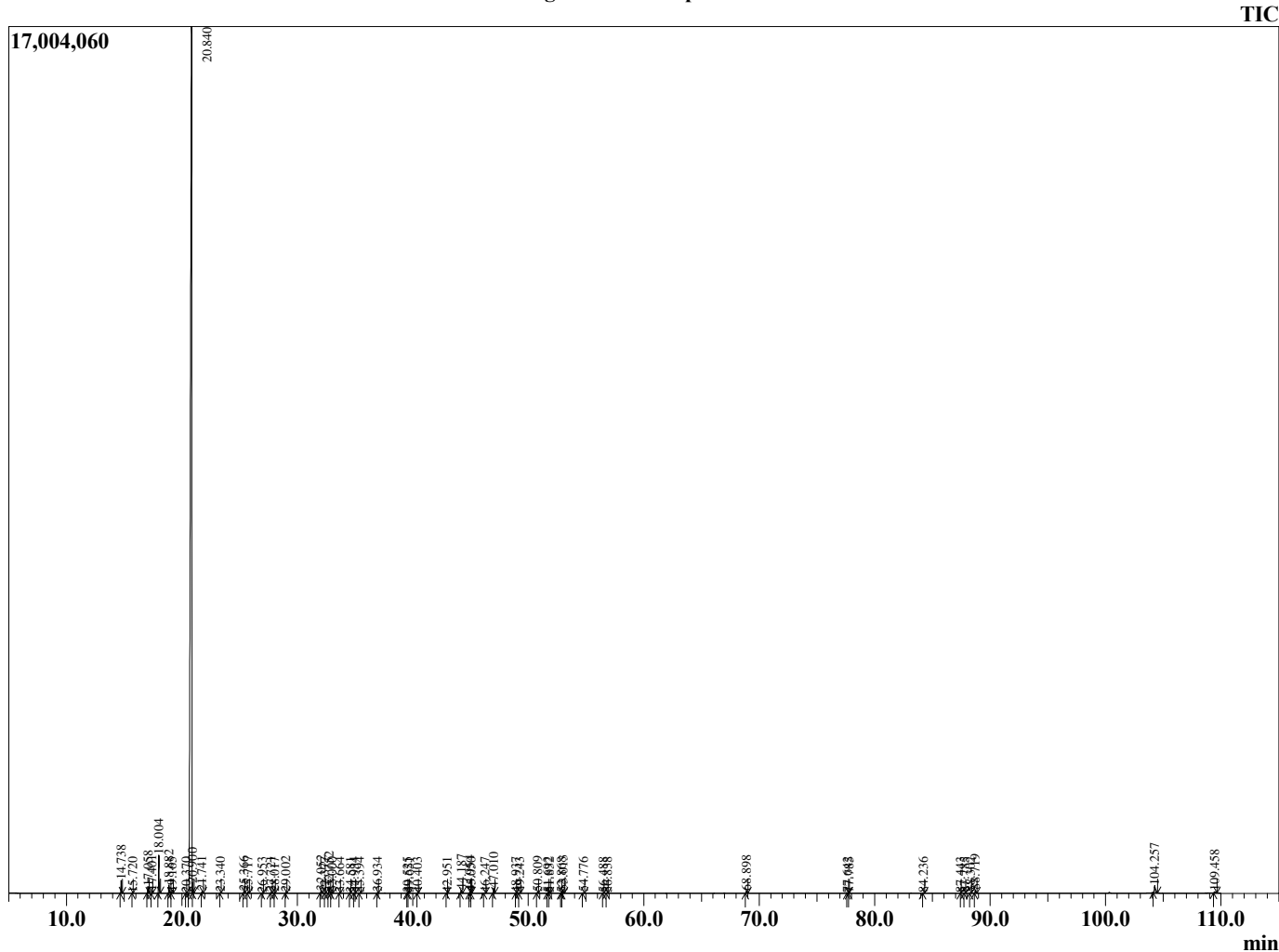
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 3/31/2021 5:22:08 PM
 Sample Type : Essential Oil
 Sample Name : Pink Grapefruit - Barefut
 Sample ID : 0109
 Injection Volume : 0.10
 Instrument ID : GC-2



Peak Report TIC

R.Time	Name	Area%
14.738	alpha-Pinene	0.55
15.720	Unidentified	0.00
17.058	Sabinene	0.30
17.401	beta-Pinene	0.11
18.004	Myrcene	1.73
18.882	Octanal	0.41
19.165	alpha-Phellandrene	0.03
20.370	Unidentified	0.01
20.840	Limonene	93.53
20.900	beta-Phellandrene	0.19
21.741	(E)-beta-Ocimene	0.07
23.340	1-Octanol	0.02
25.366	Linalool	0.08
25.717	Nonanal	0.06
26.953	trans-para-Mentha-2,8-dien-1-ol	0.02
27.721	cis-Limonene oxide	0.04
28.017	trans-Limonene oxide	0.02
29.002	Citronellal	0.04
32.052	alpha-Terpineol	0.14
32.377	Unidentified	0.01
32.752	Decanal	0.34
33.000	Octyl acetate	0.04
33.664	trans-Carveol	0.02
34.581	cis-Carveol	0.01
34.934	Neral	0.02
35.394	Carvone	0.02
36.934	Geranial	0.04
39.525	Unidentified	0.01
39.651	Undecenal	0.01
40.403	Unidentified	0.01
42.951	Unidentified	0.01
44.187	alpha-Copaene	0.18
44.954	beta-Cubebene	0.11
45.050	beta-Elemene	0.03
46.247	Dodecanal	0.04
47.010	trans-beta-Caryophyllene	0.30
48.937	(E)-beta-Farnesene	0.01
49.243	alpha-Humulene	0.04
50.809	Germacrene D	0.07
51.692	Bicyclogermacrene	0.03
51.832	alpha-Muurolene	0.01
52.868	Unidentified	0.01
53.013	delta-Cadinene	0.13
54.776	alpha-Elemol	0.05
56.488	Unidentified	0.01
56.838	Caryophyllene oxide	0.01
68.898	Nootkatone	0.14
77.642	Unidentified	0.02
77.785	Unidentified	0.00
84.236	Unidentified furanocoumarin	0.02
87.443	Unidentified	0.00
87.785	Unidentified	0.01
88.302	Unidentified furanocoumarin	0.04
88.719	Unidentified furanocoumarin	0.18
104.257	Aurapten	0.54
109.458	Unidentified	0.11
		100.00

Chromatogram Pink Grapefruit - Barefut



Comments:

The analysis of this Pink Grapefruit batch sample meets the expected chemical profile for authentic essential oil of *Citrus paradisi*. 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.