

Sample Information

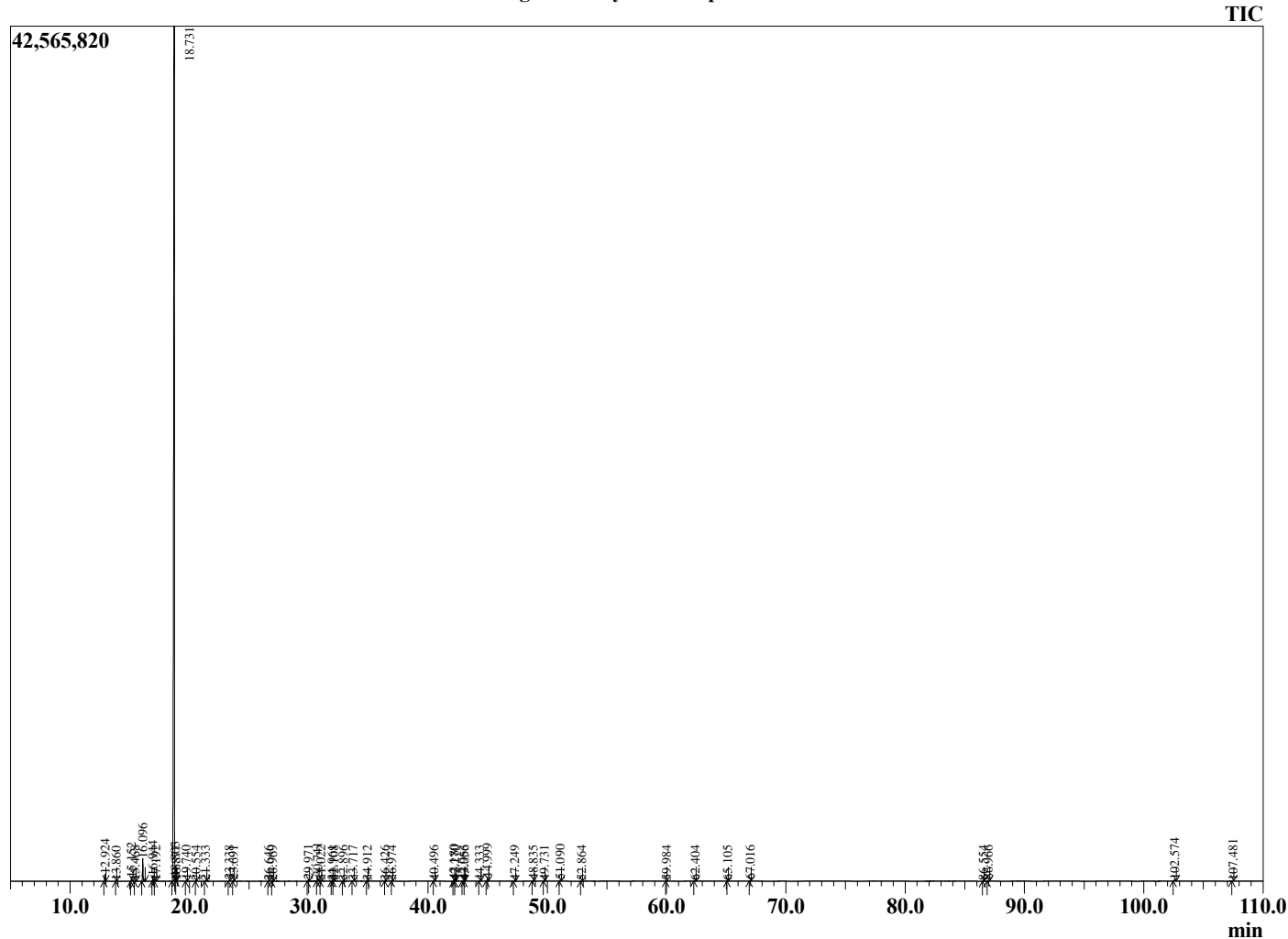
Analyzed by : Dr. Robert S. Pappas  
 Analyzed : 12/19/2020 5:51:52 AM  
 Sample Type : Essential Oil  
 Sample Name : Ruby Red Grapefruit-Barefut  
 Sample ID : 0106  
 Injection Volume : 0.10  
 Instrument ID : GC-3



Peak Report TIC

R.Time	Name	Area%
12.924	alpha-Pinene	0.51
13.860	Camphene	0.01
15.152	Sabinene	0.25
15.468	beta-Pinene	0.03
16.096	Myrcene	1.71
16.944	Octanal	0.42
17.192	alpha-Phellandrene	0.03
18.731	Limonene	94.75
18.803	beta-Phellandrene	0.03
18.877	1,8-Cineole	0.01
19.740	(E)-beta-Ocimene	0.07
20.554	gamma-Terpinene	0.01
21.333	Octanol	0.04
23.338	Linalool	0.07
23.691	Nonanal	0.06
26.646	Camphor	0.03
26.969	Citronellal	0.04
29.971	alpha-Terpineol	0.12
30.741	Decanal	0.33
31.022	Octyl acetate	0.04
31.961	Nerol	0.01
32.108	Citronellol	0.04
32.896	Neral	0.03
33.717	Geraniol	0.03
34.912	Geraniol	0.04
36.426	Thymol	0.01
36.974	Carvacrol	0.03
40.496	Eugenol	0.04
42.180	alpha-Copaene	0.10
42.270	Geranyl acetate	0.05
42.963	beta-Cubebene	0.08
43.056	beta-Elemene	0.02
44.333	Dodecanal	0.04
44.999	trans-beta-Caryophyllene	0.25
47.249	alpha-Humulene	0.04
48.835	Germacrene D	0.05
49.731	Bicyclogermacrene	0.03
51.090	delta-Cadinene	0.10
52.864	alpha-Elemol	0.04
59.984	Unidentified	0.02
62.404	Unidentified	0.02
65.105	Unidentified	0.02
67.016	Nootkatone	0.05
86.554	Unidentified	0.02
86.966	Unidentified	0.09
102.574	Aurapten	0.17
107.481	Unidentified	0.02
		100.00

Chromatogram Ruby Red Grapefruit-Barefut



Comments:

The analysis of this Ruby Red 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.