

Sample Information

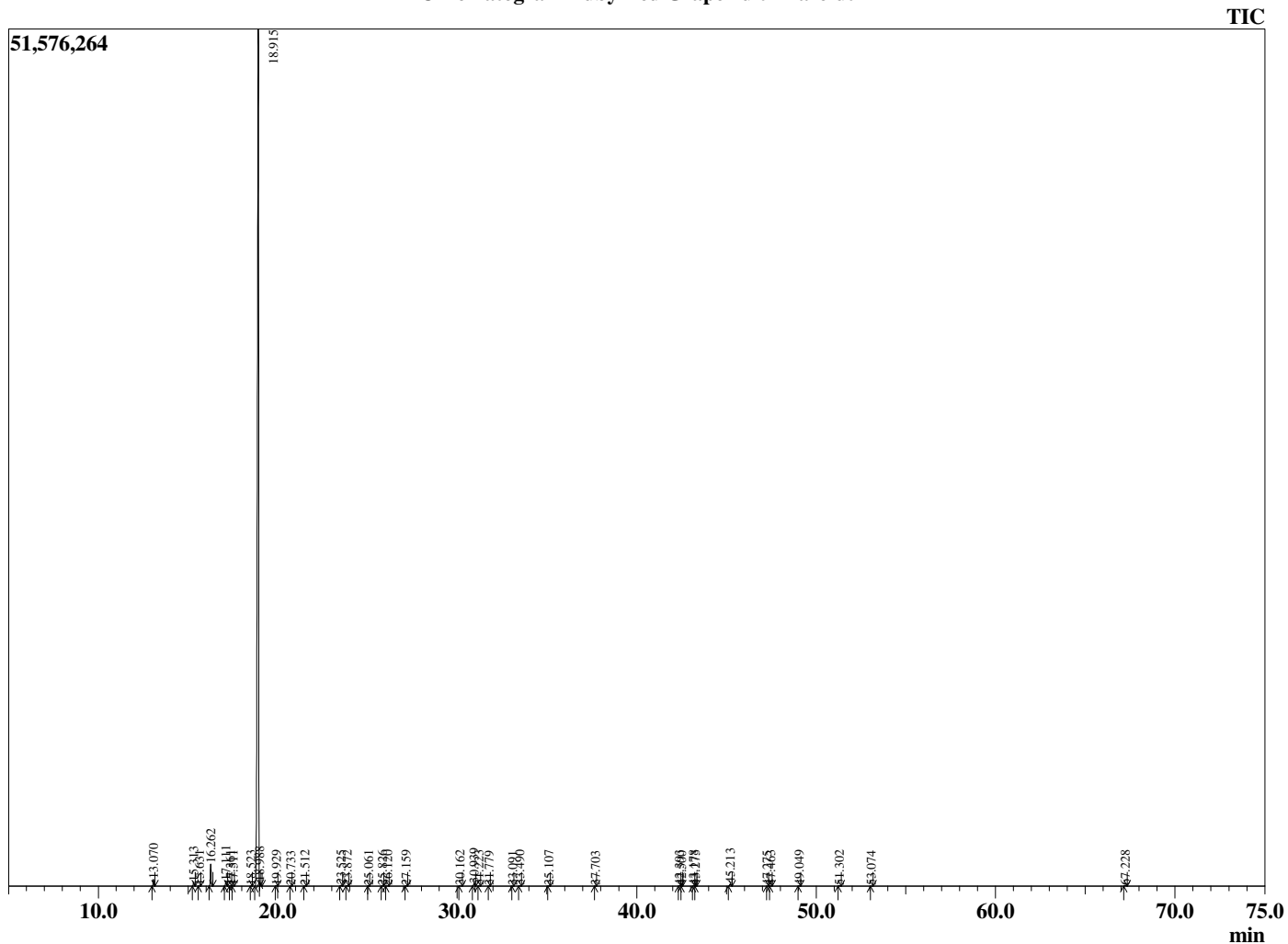
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 2/4/2020 12:19:53 AM
 Sample Type : Essential Oil
 Sample Name : Ruby Red Grapefruit - Barefut
 Sample ID : 0105
 Injection Volume : 0.10
 Instrument ID: : GC-3



Peak Report TIC

R.Time	Name	Area%
13.070	alpha-Pinene	0.47
15.313	Sabinene	0.33
15.631	beta-Pinene	0.03
16.262	Myrcene	1.64
17.111	Octanal	0.39
17.361	alpha-Phellandrene	0.02
17.511	delta-3-Carene	0.03
18.523	para-Cymene	0.01
18.915	Limonene	95.84
18.988	beta-Phellandrene	0.04
19.929	trans-beta-Farnesene	0.05
20.733	gamma-Terpinene	0.01
21.512	n-Octanol	0.02
23.525	Linalool	0.07
23.872	Nonanal	0.05
25.061	trans-para-Mentha-2,8-dienol	0.01
25.826	cis-Limonene oxide	0.04
26.120	trans-Limonene oxide	0.04
27.159	Citronellal	0.03
30.162	alpha-Terpineol	0.03
30.939	Decanal	0.24
31.223	Octyl acetate	0.03
31.779	cis-Carveol	0.01
33.091	Neral	0.01
33.490	Carvone	0.03
35.107	Geranial	0.02
37.703	Unidentified	0.01
42.393	alpha-Copaene	0.05
42.500	Geranyl acetate	0.01
43.178	beta-Cubebene	0.04
43.273	beta-Elemene	0.02
45.213	beta-Caryophyllene	0.21
47.275	trans-beta-Farnesene	0.01
47.463	alpha-Humulene	0.02
49.049	Germacrene D	0.02
51.302	delta-Cadinene	0.05
53.074	Elemol	0.01
67.228	Nootkatone	0.07
		100.00

Chromatogram Ruby Red Grapefruit - Barefut



Comments:

The analysis of this Grapefruit, Ruby Red 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.