

Sample Information

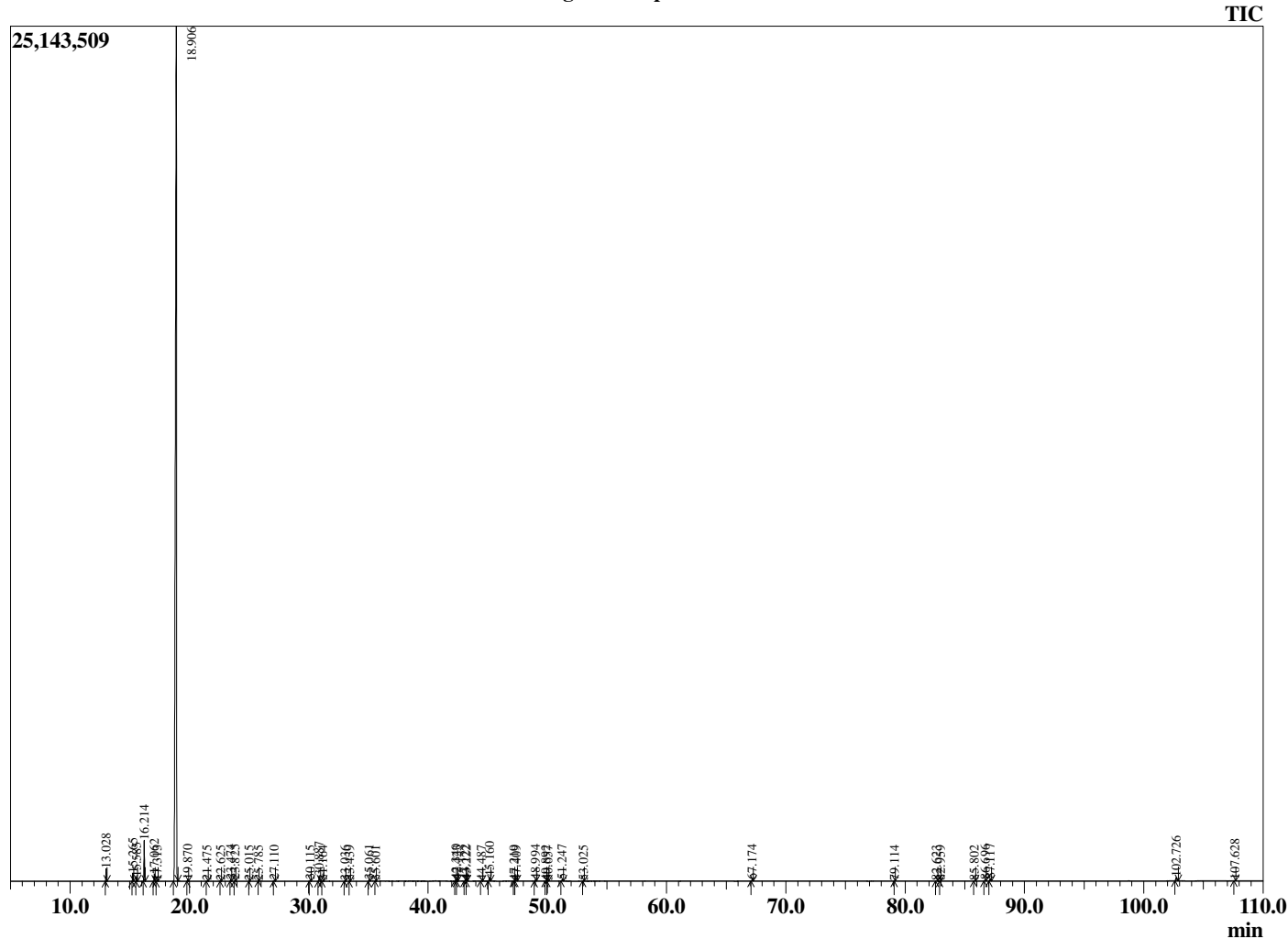
Analyzed by : Dr. Robert S. Pappas  
 Analyzed : 5/15/2020 6:12:09 AM  
 Sample Type : Essential Oil  
 Sample Name : Grapefruit - Barefut  
 Sample ID : 0108  
 Injection Volume : 0.10  
 Instrument ID: : GC-3



Peak Report TIC

R.Time	Name	Area%
13.028	alpha-Pinene	0.62
15.265	Sabinene	0.41
15.585	beta-Pinene	0.21
16.214	Myrcene	2.22
17.062	Octanal	0.40
17.313	alpha-Phellandrene	0.04
18.906	Limonene	93.60
19.870	trans-beta-Ocimene	0.08
21.475	n-Octanol	0.03
22.625	trans-Linalool oxide (furanoid)	0.01
23.474	Linalool	0.09
23.825	Nonanal	0.07
25.015	trans-para-Mentha-2,8-dienol	0.01
25.785	Unidentified	0.00
27.110	Citronellal	0.05
30.115	alpha-Terpineol	0.05
30.887	Decanal	0.32
31.164	Octyl acetate	0.04
33.036	Neral	0.03
33.439	Carvone	0.01
35.061	Geranial	0.08
35.601	Perillaldehyde	0.01
42.340	alpha-Copaene	0.11
42.423	Geranyl acetate	0.04
43.122	beta-Cubebene	0.09
43.222	bet-Elemene	0.02
44.487	Dodecanal	0.03
45.160	beta-Caryophyllene	0.28
47.219	trans-beta-Farnesene	0.02
47.409	alpha-Humulene	0.04
48.994	Germacrene D	0.08
49.892	Bicyclogermacrene	0.02
50.057	alpha-Murolene	0.01
51.247	delta-Cadinene	0.11
53.025	Elemol	0.03
67.174	Nootkatone	0.08
79.114	Unidentified	0.01
82.623	Unidentified Furanocoumarin	0.03
82.959	Unidentified	0.01
85.802	Unidentified Furanocoumarin	0.03
86.696	Isogeijerin	0.08
87.117	Unidentified Furanocoumarin	0.15
102.726	Aurapten	0.32
107.628	Unidentified	0.03
		100.00

Chromatogram Grapefruit - Barefut



Comments:

The analysis of this 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.