

Sample Information

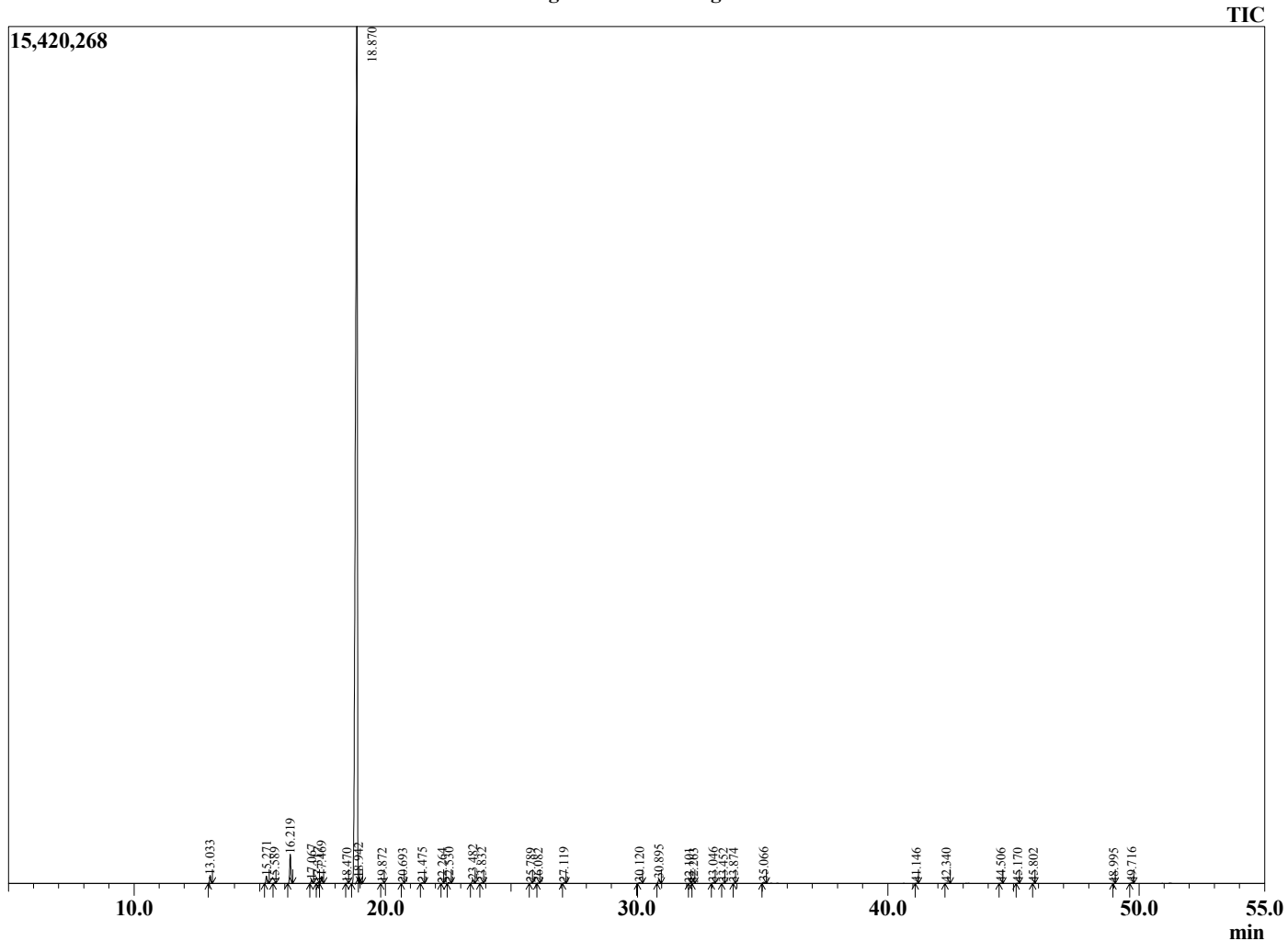
Analyzed by : Dr. Robert S. Pappas  
 Analyzed : 4/4/20 4:47:21 AM  
 Sample Type : Essential Oil  
 Sample Name : Sweet Orange - Barefut  
 Sample ID : 0109  
 Injection Volume : 0.10  
 Instrument ID: : GC-3



Peak Report TIC

R.Time	Name	Area%
13.033	alpha-Pinene	0.51
15.271	Sabinene	0.49
15.589	beta-Pinene	0.04
16.219	Myrcene	1.99
17.067	Octanal	0.24
17.317	alpha-Phellandrene	0.06
17.469	delta-3-Carene	0.51
18.470	para-Cymene	0.02
18.870	Limonene	94.64
18.942	beta-Phellandrene	0.04
19.872	trans-beta-Ocimene	0.02
20.693	gamma-Terpinene	0.02
21.475	Octanol	0.05
22.264	Isoterpinolene	0.01
22.530	Terpinolene	0.07
23.482	Linalool	0.30
23.832	Nonanal	0.04
25.789	cis-Limonene oxide	0.02
26.082	trans-Limonene oxide	0.03
27.119	Citronellal	0.05
30.120	alpha-Terpineol	0.07
30.895	Decanal	0.34
32.101	Nerol	0.01
32.263	Citronellol	0.01
33.046	Neral	0.05
33.452	Carvone	0.02
33.874	Geraniol	0.01
35.066	Geranial	0.13
41.146	Neryl acetate	0.02
42.340	alpha-Copaene	0.03
44.506	Dodecanal	0.03
45.170	beta-Caryophyllene	0.02
45.802	beta-Copaene	0.01
48.995	Germacrene D	0.01
49.716	Valencene	0.06
		100.00

Chromatogram Sweet Orange - Barefut



Comments:

The analysis of this Sweet Orange batch sample meets the expected chemical profile for authentic essential oil of *Citrus sinensis*. 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.