

Sample Information

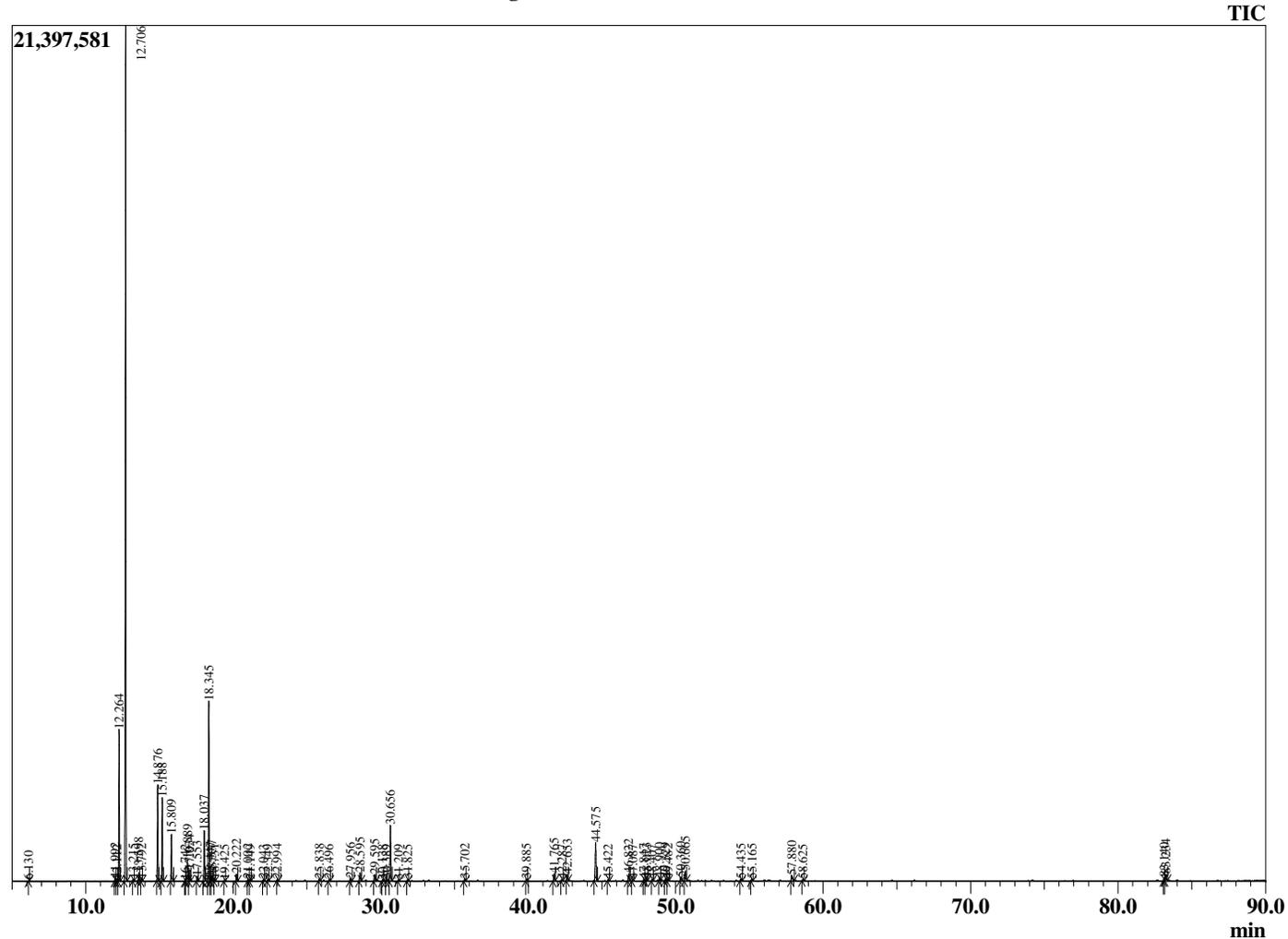
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 1/8/2019 9:43:32 PM
 Sample Type : Essential Oil
 Sample Name : Frankincense - Boswellia carterii
 Sample ID : E0C0108J
 Injection Volume : 0.10
 Instrument ID : GC-4



Peak Report TIC

R.Time	Name	Area%
6.130	Toluene	0.04
11.992	Hashishene	0.17
12.112	Tricyclene	0.06
12.264	alpha-Thujene	7.65
12.706	alpha-Pinene	47.53
13.215	Thujadiene isomer	0.10
13.598	Camphene	0.43
13.792	Thuja-2,4(10)diene	0.13
14.876	Sabinene	5.20
15.188	beta-Pinene	4.63
15.809	Myrcene	2.59
16.742	Pseudolimonene	0.06
16.889	alpha-Phellandrene	1.33
17.034	delta-3-Carene	0.66
17.553	alpha-Terpinene	0.27
18.037	para-Cymene	3.01
18.345	Limonene	10.46
18.447	beta-Phellandrene	0.23
18.537	1,8-Cineole	0.35
18.731	cis-beta-Ocimene	0.10
19.425	trans-beta-Ocimene	0.07
20.222	gamma-Terpinene	0.45
21.002	Octanol	0.13
21.149	Pinol	0.07
22.043	Terpinolene	0.09
22.349	para-Cymenene	0.08
22.994	Linalool	0.09
25.838	trans-Pinocarveol	0.13
26.496	alpha-Phellandren-8-ol	0.10
27.956	para-Mentha-1,5-dien-8-ol	0.19
28.595	Terpinen-4-ol	0.55
29.595	alpha-Terpineol	0.52
30.138	alpha-Phellandrene epoxide	0.07
30.389	Verbenone	0.10
30.656	Octyl acetate	3.82
31.209	trans-Carveol	0.06
31.825	Decyl methyl ether	0.09
35.702	Bornyl acetate	0.17
39.885	alpha-Cubebene	0.12
41.765	alpha-Copaene	0.54
42.287	beta-Bourbonene	0.10
42.653	beta-Elemene	0.42
44.575	beta-Caryophyllene	2.86
45.422	trans-alpha-Bergamotene	0.10
46.822	alpha-Humulene	0.50
47.087	Alloaromadendrene	0.10
47.847	10-beta-H-Cadina-1(6),4-diene	0.10
48.023	trans-Cadina-1(6),4-diene	0.21
48.407	Germacrene D	0.07
48.900	beta-Selinene	0.22
49.329	alpha-Selinene	0.22
49.482	alpha-Muurolene	0.12
50.360	gamma-Cadinene	0.29
50.665	delta-Cadinene	0.70
54.435	Caryophyllene oxide	0.15
55.165	Viridiflorol	0.13
57.880	alpha-Muurolol (=Torreyol)	0.44
58.625	Unidentified	0.08
83.140	Incensole	0.22
83.234	Serratol	0.56
		100.00

Chromatogram Frankincense - Boswellia carterii



Comments:

The analysis of this Frankincense - carterii batch sample meets the expected chemical profile for authentic essential oil of *Boswellia carterii*. 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.