

Sample Information

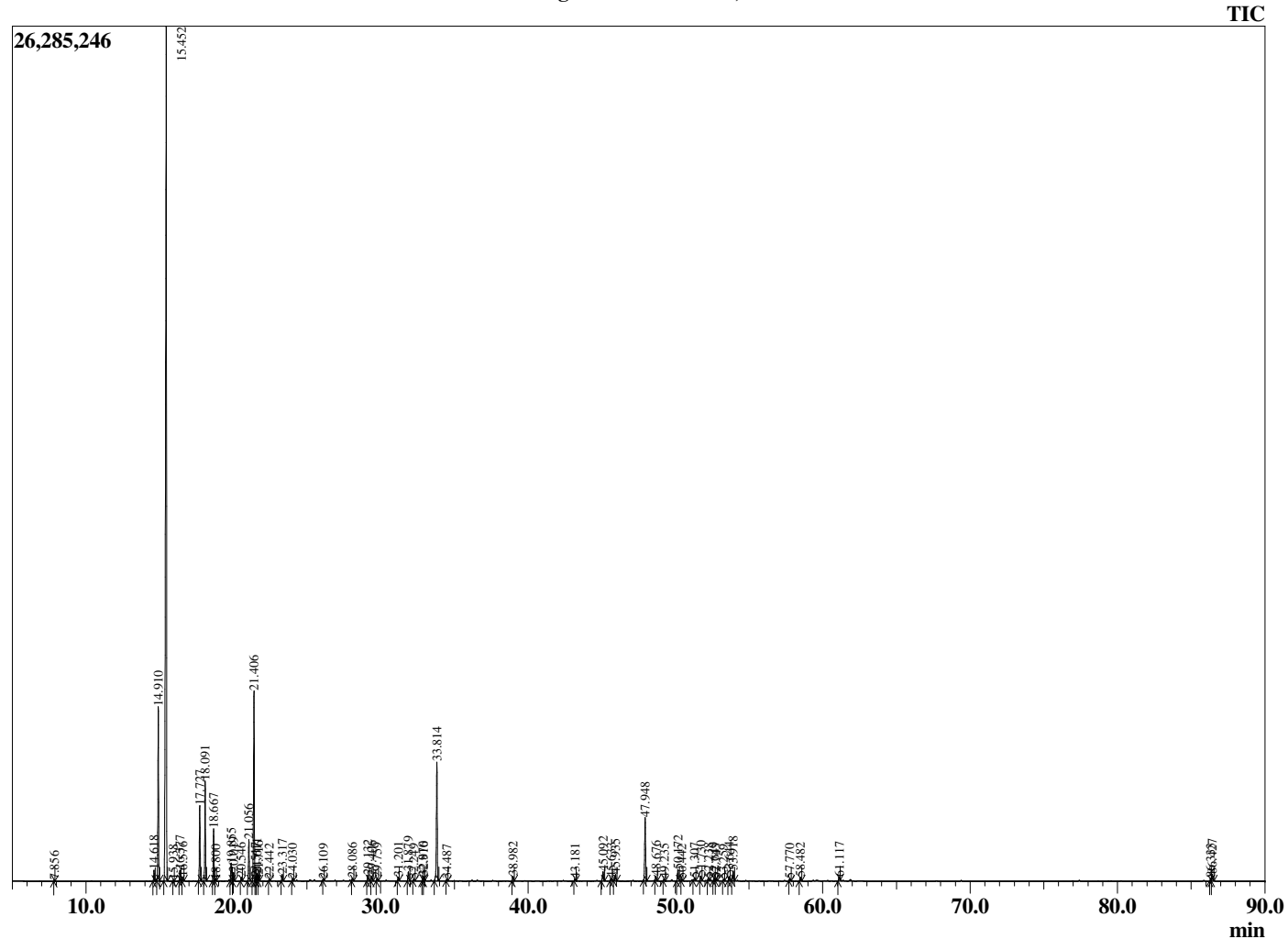
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 11/9/2018 12:19:08 PM
 Sample Type : Essential Oil
 Sample Name : Frankincense, carterii
 Sample ID : DOB1108C
 Injection Volume : 0.10
 Instrument ID : GC-3



Peak Report TIC

R.Time	Name	Area%
7.856	Toluene	0.04
14.618	Hashishene	0.45
14.910	alpha-Thujene	7.37
15.452	alpha-Pinene	50.37
15.938	Thujadiene isomer	0.05
16.377	Camphene	0.46
16.576	Thuja-2,4(10)diene	0.16
17.727	Sabinene	3.23
18.091	beta-Pinene	4.35
18.667	Myrcene	2.25
18.800	Unidentified	0.06
19.855	alpha-Phellandrene	0.80
20.019	delta-3-Carene	0.39
20.546	alpha-Terpinene	0.16
21.056	para-Cymene	1.93
21.406	Limonene	9.32
21.517	beta-Phellandrene	0.15
21.611	1,8-Cineole	0.33
21.716	cis-beta-Ocimene	0.24
22.442	trans-beta-Ocimene	0.08
23.317	gamma-Terpinene	0.31
24.030	Octanol	0.11
26.109	Linalool	0.07
28.086	alpha-Campholenal	0.15
29.132	trans-Pinocarveol	0.34
29.406	trans-Verbenol	0.24
29.759	alpha-Phellandren-8-ol	0.13
31.201	para-Mentha-1,5-dien-8-ol	0.17
31.879	Terpinen-4-ol	0.45
32.249	para-Cymen-8-ol	0.09
32.870	alpha-Terpineol	0.20
32.916	Myrtenal	0.22
33.814	Octyl acetate	6.38
34.487	trans-Carveol	0.07
38.982	Bornyl acetate	0.24
43.181	alpha-Cubebene	0.10
45.092	alpha-Copaene	0.55
45.633	beta-Bourbonene	0.16
45.935	beta-Elemene	0.38
47.948	beta-Caryophyllene	3.58
48.676	trans-alpha-Bergamotene	0.25
49.235	6,9-Guaiadiene	0.11
50.172	alpha-Humulene	0.60
50.442	Alloaromadendrene	0.07
51.307	trans-Cadina-1(6),4-diene	0.18
51.730	Germacrene D	0.26
52.238	beta-Selinene	0.16
52.649	alpha-Selinene	0.18
52.743	alpha-Muurolene	0.11
53.259	beta-Bisabolene	0.06
53.644	gamma-Cadinene	0.24
53.918	delta-Cadinene	0.54
57.770	Caryophyllene oxide	0.13
58.482	Viridiflorol	0.21
61.117	alpha-Muurolol (=Torreyol)	0.19
86.333	Incensole	0.13
86.427	Serratol	0.45
		100.00

Chromatogram Frankincense, 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.