

Sample Information

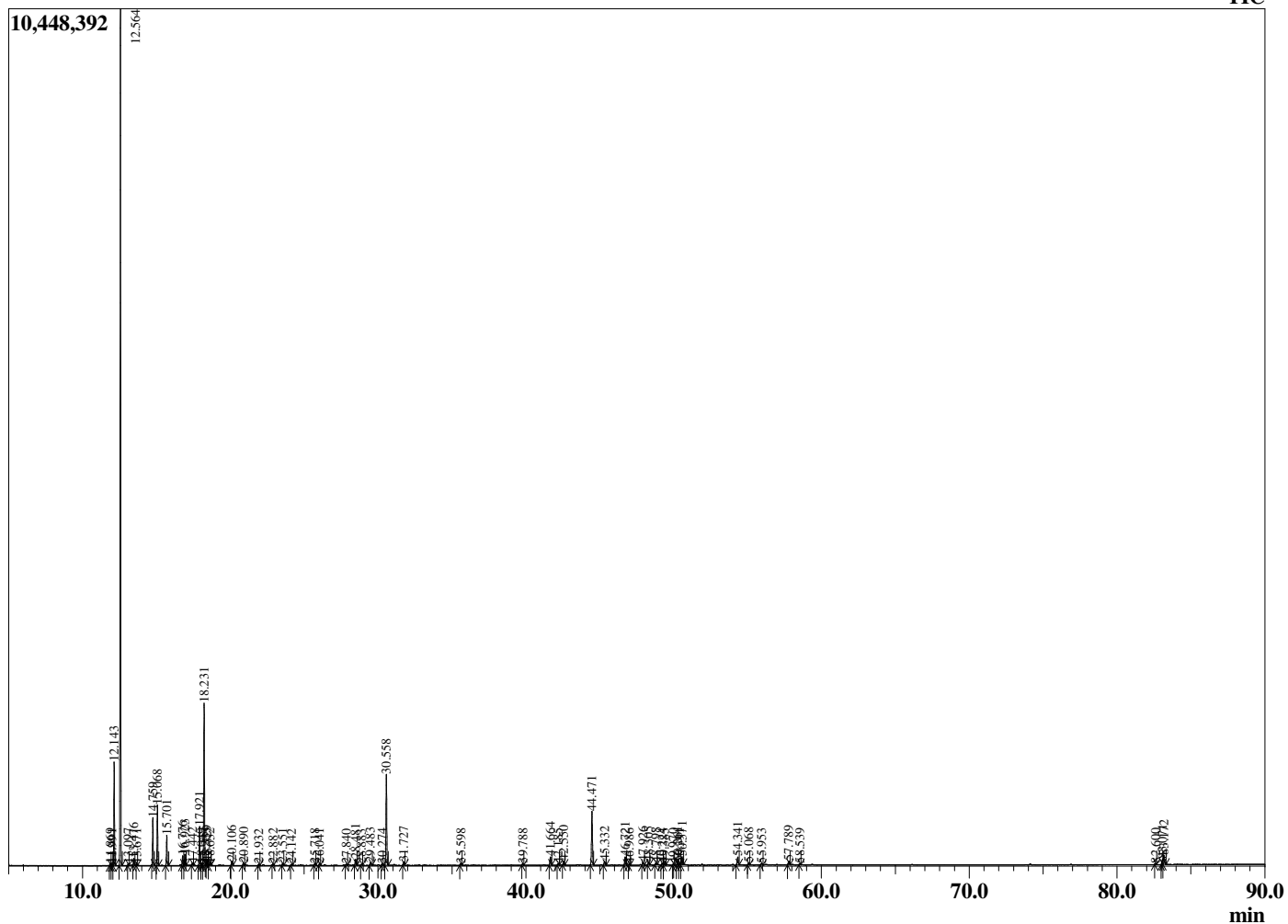
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 12/10/2018 7:01:13 AM
 Sample Type : Essential Oil
 Sample Name : Frankincense, *Boswellia carterii*
 Sample ID : BCX151030
 Injection Volume : 0.10
 Instrument ID : GC-3



Peak Report TIC

R.Time	Name	Area%
11.869	Hashishene	0.12
11.991	Tricyclene	0.08
12.143	alpha-Thujene	5.64
12.564	alpha-Pinene	47.99
13.097	Thujadiene isomer	0.10
13.476	Camphene	0.41
13.671	Thuja-2,4(10)diene	0.07
14.759	Sabinene	2.88
15.068	beta-Pinene	3.74
15.701	Myrcene	1.91
16.776	alpha-Phellandrene	0.62
16.923	delta-3-Carene	0.69
17.442	alpha-Terpinene	0.15
17.921	para-Cymene	2.56
18.049	Octyl methyl ether	0.15
18.231	Limonene	11.11
18.333	beta-Phellandrene	0.03
18.429	1,8-cineole	0.23
18.632	cis-beta-Ocimene	0.13
20.106	gamma-terpinene	0.30
20.890	1-Octanol	0.20
21.932	Terpinolene	0.08
22.882	Linalool	0.07
23.551	Thujol isomer	0.16
24.142	beta-Thujone	0.07
25.718	trans-Pinocarveol	0.11
26.041	cis-Verbenol	0.12
27.840	para-Mentha-1,5-dien-8-ol	0.08
28.481	Terpinen-4-ol	0.47
28.883	para-Cymen-8-ol	0.07
29.483	alpha-Terpineol	0.28
30.274	Verbenone	0.12
30.558	Octyl acetate	6.87
31.727	Decyl methyl ether	0.27
35.598	Bornyl acetate	0.14
39.788	alpha-Cubebene	0.12
41.664	alpha-Copaene	0.68
42.185	beta-Bourbonene	0.10
42.550	beta-Elemene	0.29
44.471	beta-Caryophyllene	4.56
45.332	trans-alpha-Bergamotene	0.33
46.721	alpha-Humulene	0.71
46.986	Alloaromadendrene	0.10
47.926	trans-Cadina-1(6),4-diene	0.28
48.305	Germacrene D	0.27
48.798	beta-Selinene	0.15
49.224	alpha-Selinene	0.18
49.385	alpha-Murolene	0.15
49.970	beta-Bisabolene	0.09
50.261	gamma-Cadinene	0.28
50.391	Unidentified	0.11
50.571	delta-Cadinene	0.67
54.341	Caryophyllene oxide	0.75
55.068	Viridiflorol	0.14
55.953	Humulene epoxide II	0.17
57.789	alpha-Murolol (=Torreyol)	0.38
58.539	epi-alpha-Cadinol	0.09
82.600	Unidentified	0.07
83.071	Incensole	0.44
83.172	Serratol	0.91
		100.00

Chromatogram Frankincense, *Boswellia carterii*



Comments:

The analysis of this Frankincense Oil 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.