

### Sample Information

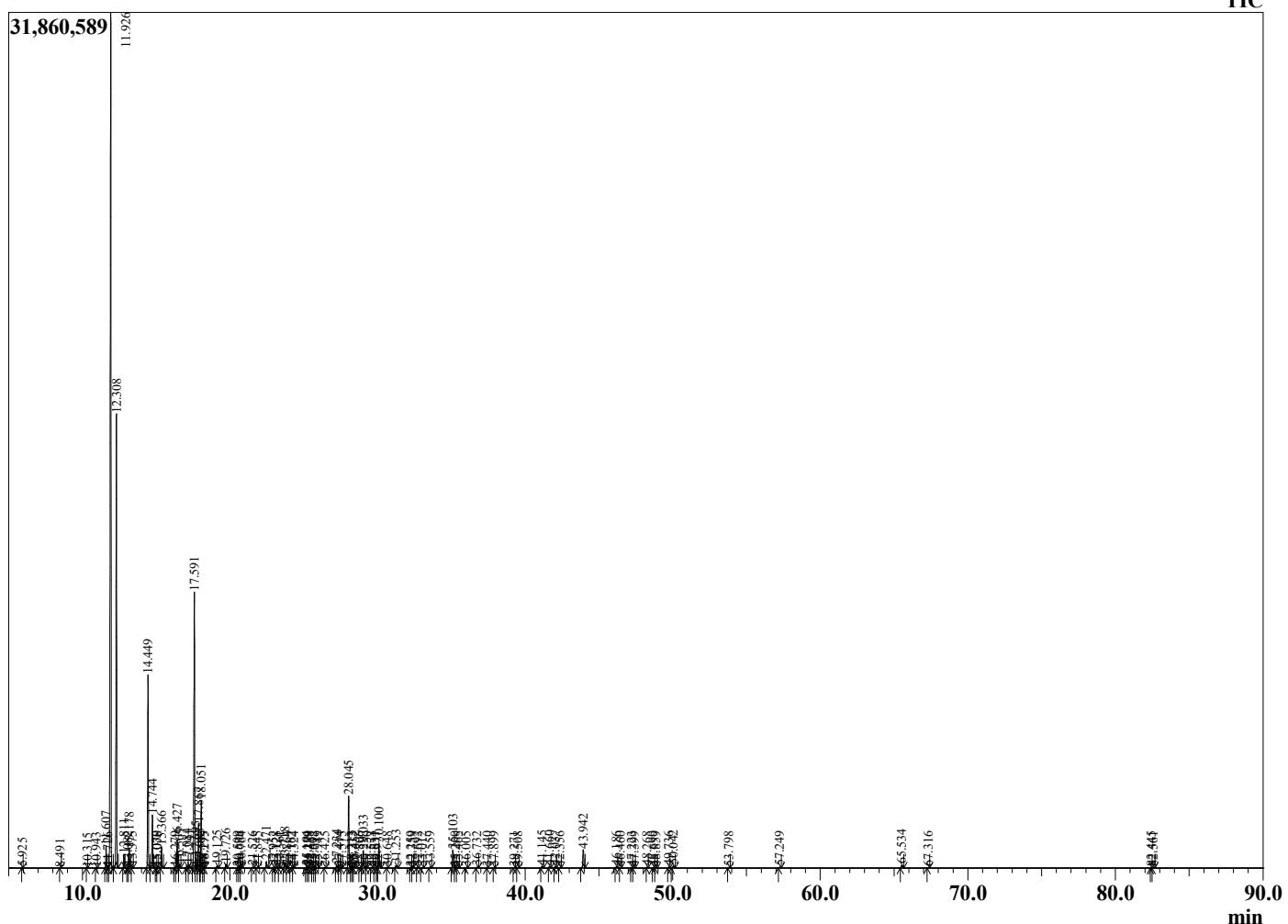
Analyzed by : Dr. Robert S. Pappas  
 Analyzed : 10/6/2021 8:52:18 PM  
 Sample Type : Essential Oil  
 Sample Name : Frankincense Oil - Barefut  
 Sample ID : 0102  
 Injection Volume : 0.10  
 Instrument ID: : GC-4



### Peak Report TIC

R.Time	Name	Area%
5.925	Toluene	0.03
8.491	Unidentified	0.01
10.315	Unidentified	0.01
10.943	Unidentified	0.02
11.607	Hashishene	0.79
11.726	Tricyclene	0.04
11.926	alpha-Thujene	41.14
12.308	alpha-Pinene	16.84
12.811	Thujadiene isomer	0.49
13.082	alpha-Fenchene	0.03
13.178	Camphepane	0.72
13.375	Thuja-2,4(10)-diene	0.04
14.449	Sabinene	7.33
14.744	beta-Pinene	2.01
15.030	Unidentified	0.01
15.078	6-Methyl-5-hepten-2-one	0.02
15.366	Myrcene	0.81
16.279	Pseudolimonene	0.02
16.427	alpha-Phellandrene	1.15
16.569	delta-3-Carene	0.14
17.084	alpha-Terpinene	0.13
17.241	ortho-Cymene	0.12
17.591	para-Cymene	12.25
17.695	Unidentified	0.41
17.867	Limonene	1.83
17.985	beta-Phellandrene	0.07
18.051	1,8-Cineole	2.75
18.199	meta-Cymene	0.03
18.275	Unidentified	0.01
19.125	Unidentified	0.09
19.726	gamma-Terpinene	0.17
20.509	trans-4-Thujanol	0.02
20.636	Unidentified	0.02
20.764	Unidentified	0.04
21.526	Terpinolene	0.04
21.845	Dehydro-p-cymene	0.03
22.471	Linalool	0.33
22.952	alpha-Thujone	0.04
23.128	Unidentified	0.04
23.361	Unidentified	0.05
23.718	beta-Thujone	0.33
23.864	Myrcenol	0.04
24.162	cis-para-Menth-2-en-1-ol	0.03
24.324	alpha-Campholenal	0.01
25.194	trans-Sabinol	0.05
25.279	trans-Pinocarveol	0.04
25.388	trans-para-Menth-2-en-1-ol	0.02
25.602	trans-Verbenol	0.04
25.717	Camphor	0.01
25.949	alpha-Phellandrene-8-ol	0.02
26.425	Unidentified	0.02
27.234	Unidentified	0.16
27.414	para-Menta-1,5-dien-8-ol	0.04
27.575	Unidentified	0.01
28.045	Terpinen-4-ol	3.50
28.212	Thuj-3-en-10-al	0.02
28.313	4-Methyl acetophenone	0.02
28.452	para-Cymen-8-ol	0.09
28.806	Myrtenol	0.01
29.033	alpha-Terpineol	0.86
29.250	Unidentified	0.01
29.573	alpha-Phellandrene epoxide	0.03

Chromatogram Frankincense Oil - Barefut



### Comments:

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

R.Time	Name	Area%
29.831	2-Pinen-4-one	0.03
29.977	Unidentified	0.01
30.100	Octyl acetate	1.18
30.648	trans-Carveol	0.01
31.253	1-Methoxy decane	0.13
32.259	Cuminaldehyde	0.03
32.359	Unidentified	0.01
32.692	Unidentified	0.03
33.012	Unidentified	0.04
33.559	Unidentified	0.05
35.103	Bornyl acetate	0.90
35.260	Isobornyl acetate	0.03
35.465	Thymol	0.02
36.005	Carvacrol	0.03
36.732	Unidentified	0.06
37.440	Unidentified	0.01
37.899	Unidentified	0.01
39.271	alpha-Cubebene	0.02
39.508	Eugenol	0.02
41.145	alpha-Copaene	0.08
41.660	beta-Bourbonene	0.08
42.037	beta-Elemene	0.08
42.356	Unidentified	0.02
43.942	trans-beta-Caryophyllene	1.01
46.186	alpha-Humulene	0.06
46.460	Alloromadendrene	0.01
47.223	trans-Cadina-1(6),4-diene	0.01
47.399	gamma-Murolene	0.03
48.268	beta-Selinene	0.04
48.699	alpha-Selinene	0.03
48.859	alpha-Murolene	0.02
49.736	gamma-Cadinene	0.04
50.042	delta-Cadinene	0.10
53.798	Caryophyllene oxide	0.03
57.249	tau-Cadinol	0.04
65.534	Unidentified	0.16
67.316	Unidentified	0.02
82.445	Unidentified	0.01
82.561	Serratol	0.04
		100.00