

Sample Information

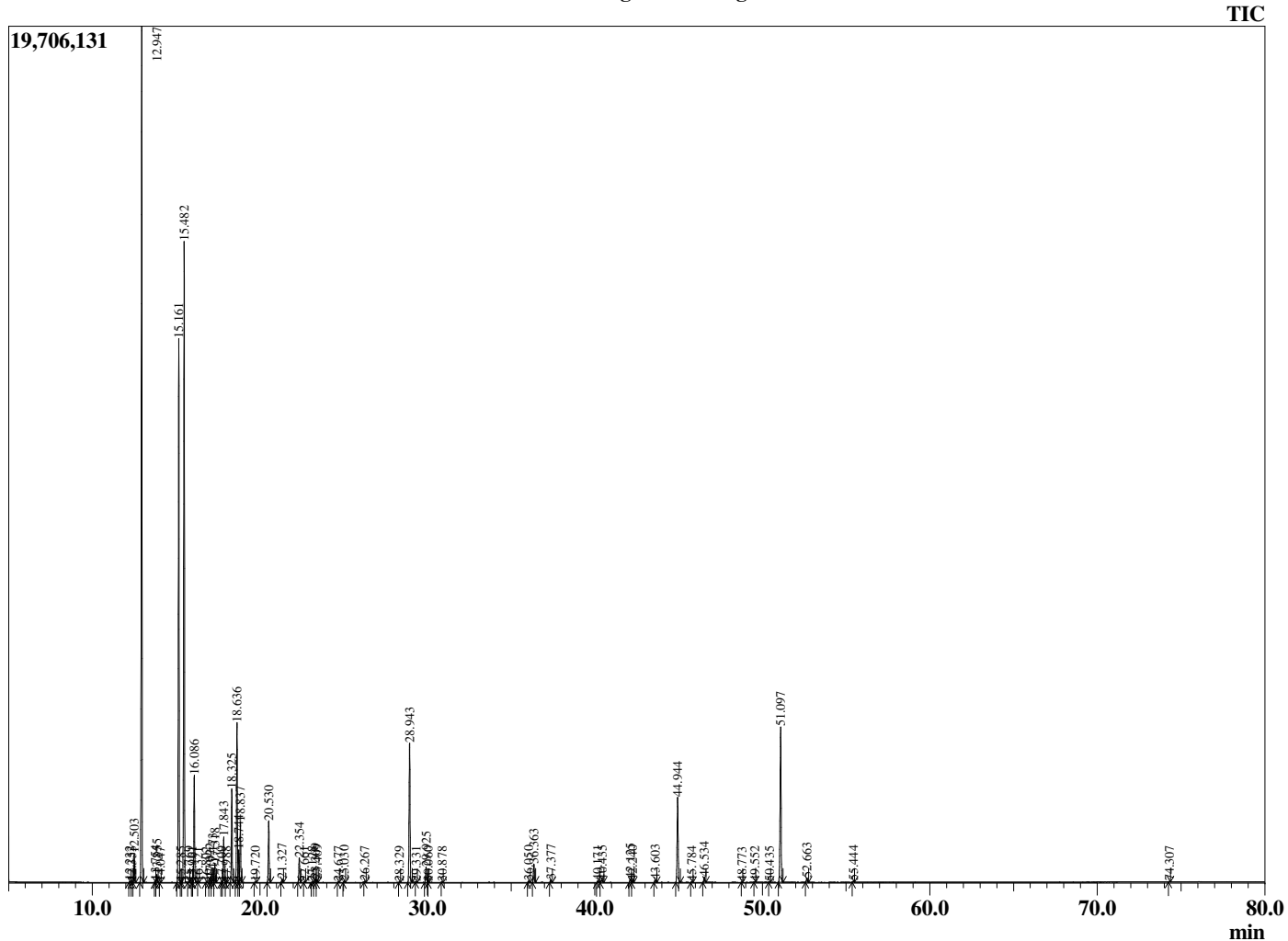
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 9/22/2018 7:31:28 AM
 Sample Type : Essential Oil
 Sample Name : Nutmeg
 Sample ID : A1220H
 Injection Volume : 0.10
 Instrument ID : GC-3



Peak Report TIC

R.Time	Name	Area%
12.232	Hashishene	0.03
12.353	Tricyclene	0.01
12.503	alpha-Thujene	0.78
12.947	alpha-Pinene	25.15
13.754	alpha-Fenchene	0.05
13.855	Camphene	0.22
14.047	Thuja-2,4(10)diene	0.01
15.161	Sabinene	16.71
15.285	Unidentified	0.02
15.482	beta-Pinene	19.90
15.769	Unidentified	0.01
15.961	3-para-Menthene	0.01
16.086	Myrcene	3.18
16.321	trans-para-Menthane	0.01
16.802	cis-meta-Menth-8-ane	0.01
17.022	Pseudolimonene	0.13
17.173	alpha-Phellandrene	0.42
17.318	delta-3-Carene	0.58
17.709	1,4-Cineole	0.01
17.843	alpha-Terpinene	1.38
17.988	ortho-Cymene	0.01
18.325	para-Cymene	2.93
18.636	Limonene	5.15
18.744	beta-Phellandrene	0.97
18.837	1,8-Cineole	1.86
19.720	trans-para-Ocimene	0.02
20.530	gamma-Terpinene	1.99
21.327	trans-Sabinene hydrate	0.12
22.354	Terpinolene	0.82
22.661	para-Cymenene	0.03
23.128	Unidentified	0.02
23.309	Linalool	0.13
23.409	cis-Sabinene hydrate	0.10
24.677	alpha-Fenchol	0.02
25.030	cis-para-Menth-2-en-1-ol	0.06
26.267	trans-para-Menth-2-en-1-ol	0.04
28.329	Borneol	0.02
28.943	Terpinen-4-ol	5.11
29.331	Unidentified	0.02
29.925	alpha-Terpineol	0.56
30.060	Unidentified	0.01
30.878	Unidentified	0.01
36.050	Bornyl acetate	0.05
36.363	Safrole	0.68
37.377	Unidentified	0.09
40.171	alpha-Terpinyl acetate	0.08
40.435	Eugenol	0.10
42.125	alpha-Copaene	0.13
42.240	Neryl acetate	0.06
43.603	Methyleugenol	0.09
44.944	beta-Caryophyllene	3.45
45.784	trans-alpha-Bergamotene	0.03
46.534	Isoeugenol	0.19
48.773	Germacrene D	0.01
49.552	Methyl isoeugenol	0.01
50.435	beta-Bisabolene	0.01
51.097	Myristicin	6.16
52.663	Elemicin	0.17
55.444	Methoxyeugenol	0.04
74.307	alpha-Springene	0.01
		100.00

Chromatogram Nutmeg



Comments:

The analysis of this Nutmeg batch sample meets the expected chemical profile for authentic essential oil of *Myristica fragrans*. 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.