

Sample Information

Analyzed by : Dr. Robert S. Pappas  
 Analyzed : 7/10/2019 7:46:53 AM  
 Sample Type : Essential Oil  
 Sample Name : Copaiba Balsam - Barefut  
 Sample ID : 0106  
 Injection Volume : 0.10  
 Instrument ID : GC-3

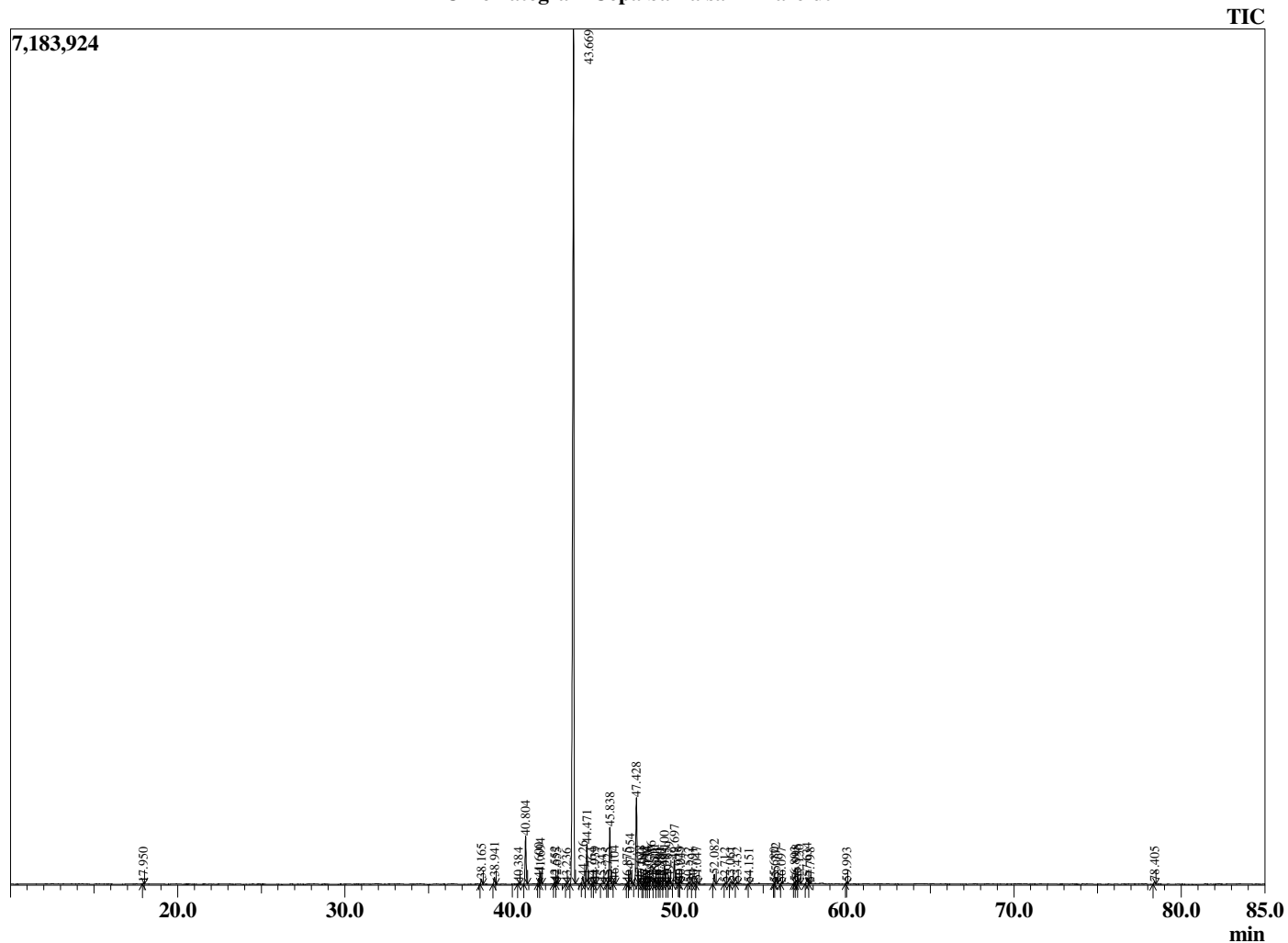


Peak Report TIC

R.Time	Name	Area%
17.950	trans-beta-Ocimene	0.06
38.165	delta-Elemene	0.37
38.941	alpha-Cubebene	0.51
40.384	alpha-Ylangene	0.05
40.804	alpha-Copaene	3.24
41.600	beta-Cubebene	0.38
41.694	beta-Elemene	0.75
42.552	Cyperene	0.15
42.655	Unidentified	0.08
43.236	cis-alpha-Bergamotene	0.03
43.669	beta-Caryophyllene	70.29
44.226	gamma-Elemene	0.47
44.471	trans-alpha-Bergamotene	2.76
44.764	beta-Copaene	0.04
44.939	beta-Sesquiphellandrene	0.15
45.343	Unidentified	0.06
45.725	trans-beta-Farnesene	0.06
45.838	alpha-Humulene	3.98
46.104	Alloaromadendrene	0.20
46.875	10-beta-H-Cadina-1(6),4-diene	0.06
47.054	trans-Cadina-1(6),4-diene	1.05
47.428	Germacrene D	6.33
47.622	Unidentified	0.23
47.780	Unidentified	0.02
47.912	beta-Selinene	0.21
48.050	Viridiflorene	0.08
48.136	Unidentified	0.15
48.316	Bicyclogermacrene	0.60
48.511	alpha-Murolene	0.35
48.663	cis-alpha-Bisabolene	0.10
48.781	delta-Amorphene	0.06
48.880	Unidentified	0.03
49.100	beta-Bisabolene	1.24
49.265	Unidentified	0.09
49.379	gamma-Cadinene	0.41
49.697	delta-Cadinene	1.73
49.975	Unidentified	0.05
50.049	beta-Sesquiphellandrene	0.11
50.532	trans-Cadina-1,4-diene	0.07
50.791	alpha-Cadinene	0.12
51.047	trans-alpha-Bisabolene	0.21
52.082	Germacrene B	0.68
52.712	Unidentified	0.04
53.061	Caryophyllene alcohol	0.20
53.432	Caryophyllene oxide	0.11
54.151	Viridiflorol	0.03
55.680	Unidentified	0.04
55.772	Humulane-1,6-dien-3-ol	0.41
56.097	1-epi-Cubenol	0.05
56.893	alpha-Murolol (=Torreyol)	0.11
56.998	epi-alpha-Cadinol	0.29
57.150	delta-Cadinol	0.30
57.634	alpha-Cadinol	0.49
57.798	Unidentified	0.04
59.993	Juniper camphor	0.11
78.405	Unidentified	0.19
		100.00

This report is valid for 1 year from the analyzed date.

Chromatogram Copaiba Balsam - Barefut



Comments:

The analysis of this Copaiba Balsam batch sample meets the expected chemical profile for authentic essential oil of *Copaifera langsdorffii*. No contamination or adulteration was detected.