

Sample Information

Analyzed by : Dr. Robert S. Pappas
 Analyzed : 9/10/2018 8:13:48 PM
 Sample Type : Essential Oil
 Sample Name : Copaiba Balsam
 Sample ID : D0B0907F
 Injection Volume : 0.10
 Instrument ID: : GC-2

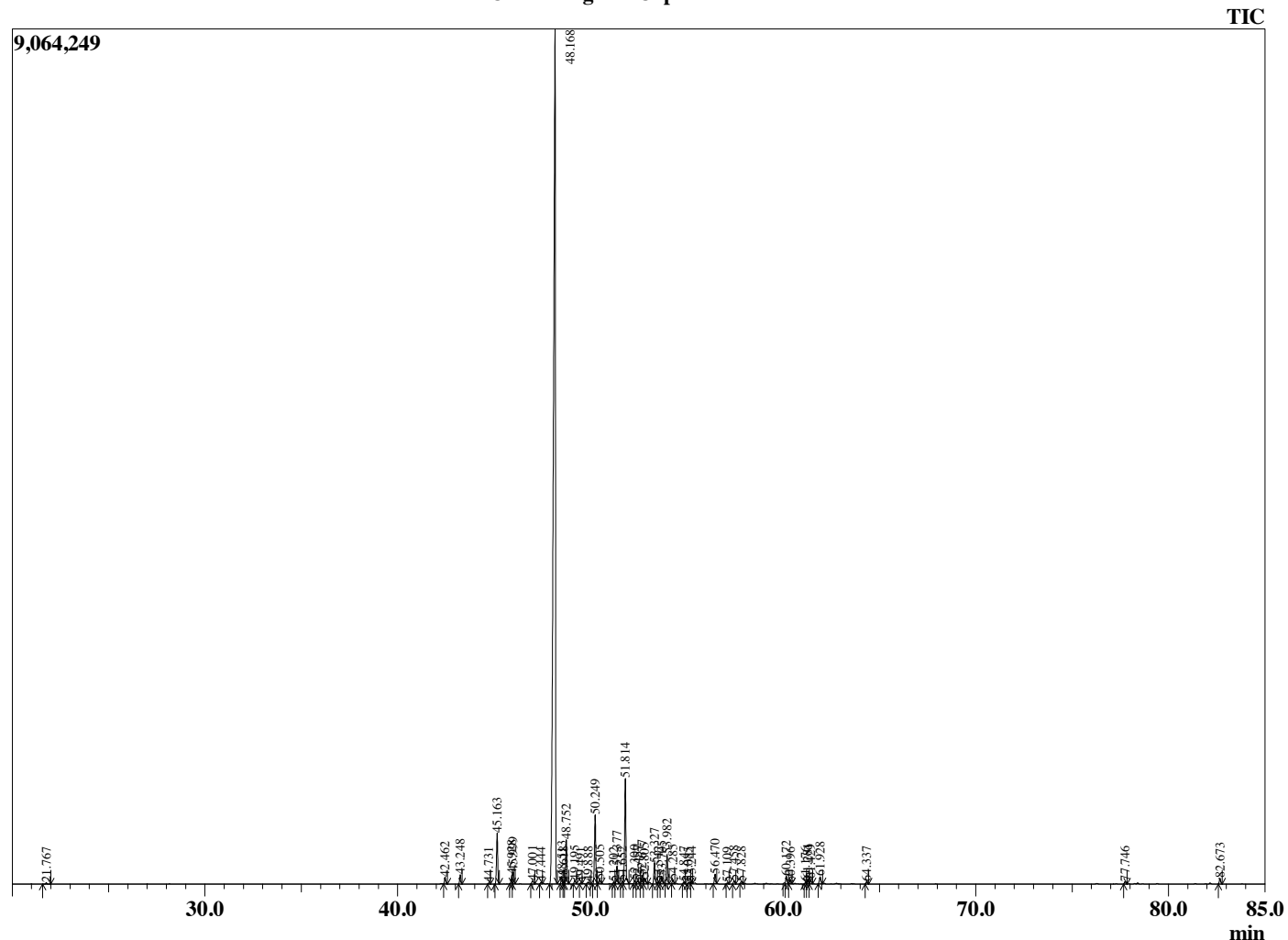
This report is valid for 1 year from the Analyzed Date



Peak Report TIC

R.Time	Name	Area%
21.767	Z-beta-Ocimene	0.06
42.462	delta-Elemene	0.33
43.248	alpha-Cubebene	0.48
44.731	alpha-Ylangene	0.06
45.163	alpha-Copaene	2.57
45.928	beta-Cubebene	0.42
45.999	beta-Elemene	0.65
47.001	Cyperene	0.23
47.444	cis-Caryophyllene	0.07
48.168	beta-Caryophyllene	73.47
48.513	gamma-Elemene	0.38
48.618	beta-Copaene	0.09
48.752	trans-alpha-Bergamotene	2.27
49.195	Z-beta-Farnesene	0.19
49.491	13-nor-Eudesm-5-en-11-one	0.04
49.888	E-beta-Farnesene	0.14
50.249	alpha-Humulene	3.58
50.505	Alloaromadendrene	0.18
51.202	cis-Muurola-4(14),5-diene	0.07
51.377	trans-Cadina-1(6),4-diene	0.95
51.652	alpha-Amorphene	0.12
51.814	Germacrene D	5.78
52.300	beta-Selinene	0.18
52.457	trans-Muurola-4(14),5-diene	0.23
52.677	Bicyclogermacrene	0.51
52.805	alpha-Murolene	0.40
53.327	beta-Bisabolene	1.12
53.542	beta-Himachalene	0.08
53.705	gamma-Cadinene	0.39
53.982	delta-Cadinene	1.50
54.285	Sesquiterpene	0.19
54.847	trans-Cadina-1,4-diene	0.10
55.085	alpha-Cadinene	0.12
55.244	Bisabolene isomer	0.10
56.470	Germacrene B	0.49
57.109	Maaliol	0.05
57.458	Caryophyllenyl alcohol	0.18
57.828	Caryophyllene oxide	0.12
60.172	Humulane-1,6-dien-3-ol	0.42
60.396	1-epi-Cubenol	0.06
61.176	tau-Cadinol	0.10
61.281	epi-alpha-Cadinol	0.28
61.429	delta-Cadinol	0.25
61.928	alpha-Cadinol	0.42
64.337	Juniper camphor	0.13
77.746	Copalol	0.14
82.673	trans-Kolavelool	0.31
		100.00

Chromatogram Copaiba Balsam



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.