

Sample Information

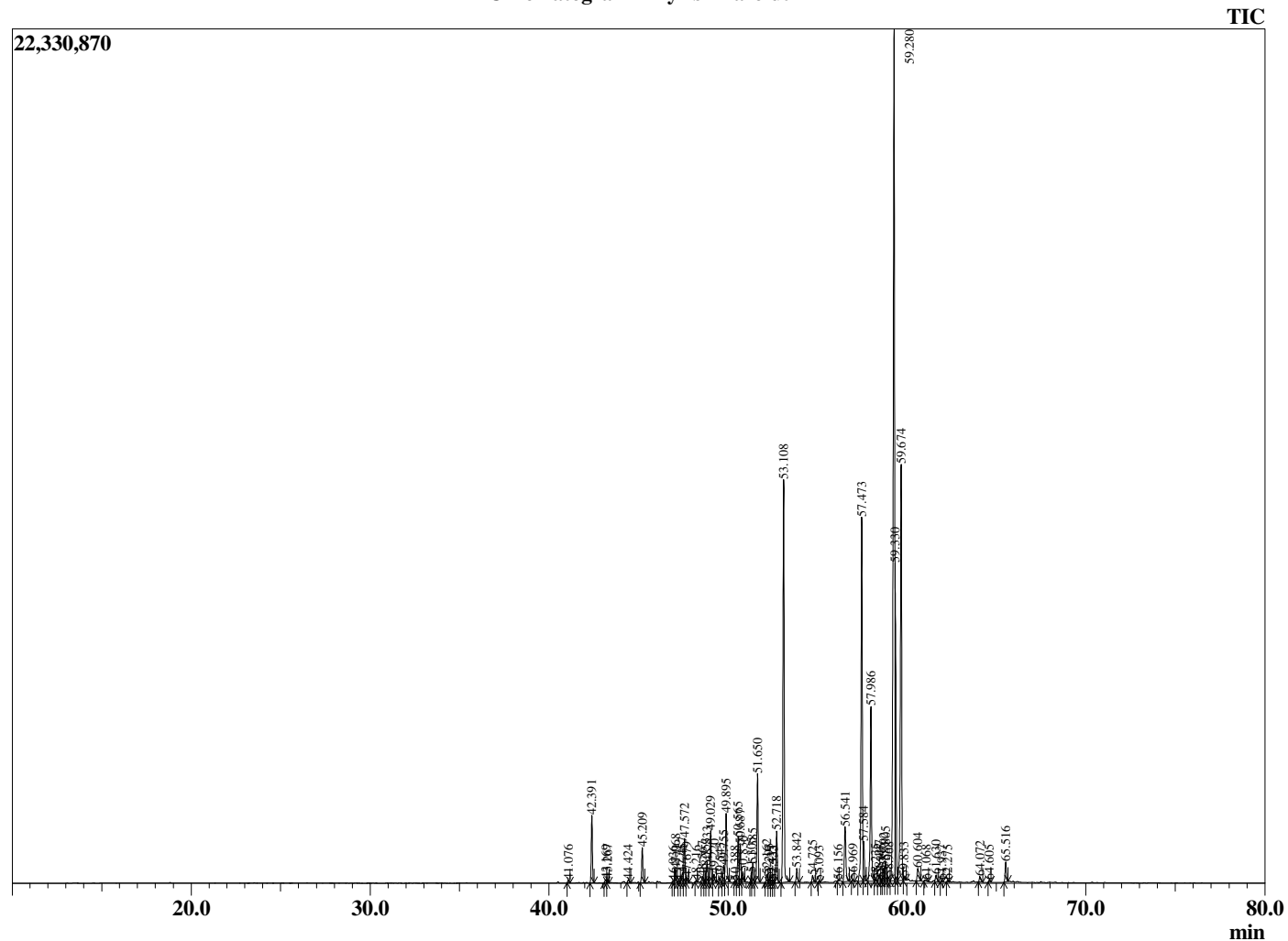
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 2/4/2020 8:11:30 AM
 Sample Type : Essential Oil
 Sample Name : Amyris - Barefut
 Sample ID : 0109
 Injection Volume : 0.10
 Instrument ID: : GC-3



Peak Report TIC

R.Time	Name	Area%
41.076	Unidentified	0.07
42.391	alpha-Copaene	1.75
43.169	beta-Cubebene	0.10
43.267	beta-Elmene	0.09
44.424	alpha-Gurjunene	0.09
45.209	beta-Caryophyllene	0.96
46.936	epi-beta-Santalene	0.05
47.068	alpha-Acoradiene	0.35
47.274	trans-beta-Farnesene	0.04
47.457	alpha-Humulene	0.32
47.572	beta-Acoradiene	1.23
47.679	beta-Santalene	0.15
48.216	Unidentified	0.04
48.567	beta-Chamigrene	0.18
48.753	Epizonarene	0.22
48.833	gamma-Curcumene	0.58
49.029	Ar-Curcumene	1.35
49.220	Unidentified	0.23
49.543	beta-Selinene	0.12
49.755	Valencene	0.48
49.895	alpha-Zingiberene	2.09
50.388	Unidentified	0.03
50.565	4-epi-cis-Dihydroagarofuran	1.23
50.687	beta-Bisabolene	0.96
50.836	beta-Dihydroagarofuran	0.28
51.305	delta-Cadinene	0.22
51.385	(-)-alpha-Panasinsen	0.55
51.650	beta-Sesquiphellandrene	3.03
52.162	alpha-Maaline	0.22
52.293	Unidentified	0.12
52.435	Eremophilene isomer	0.07
52.533	Unidentified	0.06
52.718	Selina-3,7(11)-diene	1.42
53.108	Elemol	11.61
53.842	trans-Nerolidol	0.38
54.725	Unidentified	0.20
55.093	Caryophyllene oxide	0.04
56.156	Unidentified	0.02
56.541	5-epi-7-epi-alpha-Eudesmol	1.94
56.969	Zingiberenol	0.06
57.473	10-epi-gamma-Eudesmol	10.63
57.584	Eremoligenol isomer	0.96
57.986	gamma-Eudesmol	5.31
58.235	Unidentified	0.08
58.447	Hinesol	0.22
58.545	Unidentified	0.04
58.702	Unidentified	0.35
58.805	Unidentified	0.58
58.968	Unidentified	0.13
59.280	Valerianol	28.04
59.330	alpha-Eudesmol + beta-Eudesmol	6.29
59.674	7-epi-alpha-Eudesmol	12.55
59.833	Unidentified	0.11
60.604	Unidentified	0.54
61.068	Unidentified	0.08
61.630	Unidentified	0.24
61.937	Unidentified	0.05
62.275	Unidentified	0.05
64.072	Unidentified	0.18
64.605	Albicanol	0.06
65.516	Drimenol	0.57
		100.00

Chromatogram Amyris - Barefut



Comments:

The analysis of this Amyris batch sample meets the expected chemical profile for authentic essential oil of *Amyris balsamifera*. 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.