

Sample Information

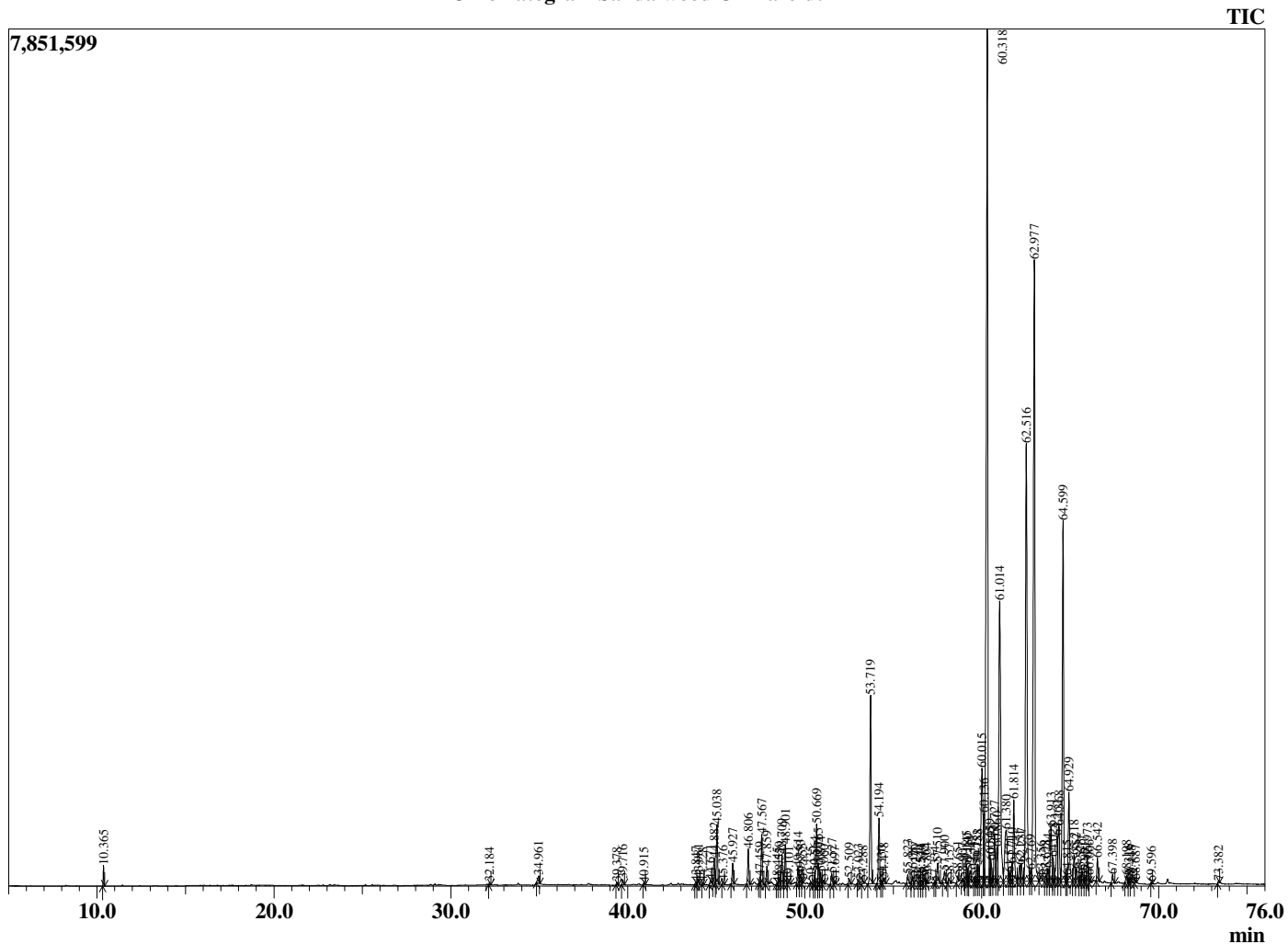
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 10/9/2020 11:07:24 PM
 Sample Type : Essential Oil
 Sample Name : Sandalwood Oil-Barefut
 Sample ID : 0102
 Injection Volume : 0.10
 Instrument ID : GC-3



Peak Report TIC

R.Time	Name	Area%
10.365	Santene	0.21
32.184	Unidentified	0.03
34.961	Teresantalic acid	0.16
39.378	delta-Elemene	0.04
39.716	Unidentified	0.08
40.915	Unidentified	0.03
43.847	4-(4-Methylphenyl)pentanal	0.04
43.981	Sesquithujene isomer	0.09
44.228	Cedrene isomer	0.03
44.671	cis-alpha-Bergamotene	0.04
44.882	alpha-Cedrene	0.43
45.038	alpha-Santalene	1.04
45.376	beta-Cedrene	0.05
45.927	trans-alpha-Bergamotene	0.35
46.806	epi-beta-Santalene	0.62
47.459	Unidentified	0.11
47.567	beta-Santalene	0.90
47.859	beta-Acoradiene	0.31
48.445	Unidentified	0.03
48.550	Unidentified	0.12
48.709	gamma-Curcumene	0.52
48.901	Ar-Curcumene	0.69
49.101	Unidentified	0.06
49.614	Unidentified	0.26
49.753	Curcumene isomer	0.15
49.855	alpha-Selinene	0.06
50.335	(E,E)-alpha-Farnesene	0.04
50.564	beta-Bisabolene	0.18
50.669	beta-Curcumene	1.12
50.765	alpha-Alaskene	0.33
50.894	Sesquicineole	0.22
51.060	gamma-Cuprenene	0.07
51.527	beta-Sesquiphellandrene	0.21
51.697	(E)-gamma-Bisabolene	0.03
52.509	(E)-alpha-Bisabolene	0.10
53.023	Unidentified	0.07
53.288	Unidentified	0.05
53.719	trans-Nerolidol	3.40
54.194	Dendaralasin	1.20
54.330	Unidentified	0.05
54.478	Unidentified	0.10
55.823	Guaiol	0.18
56.087	Unidentified	0.12
56.270	Unidentified	0.10
56.544	Cedrol	0.05
56.570	Unidentified	0.06
56.765	Unidentified	0.10
56.864	Unidentified	0.08
57.334	Unidentified	0.03
57.510	Unidentified	0.46
57.900	alpha-Acorenol	0.26
58.157	beta-Acorenol	0.09
58.651	Unidentified	0.11
58.907	Acorenol isomer	0.05
59.145	Khusilal	0.31
59.180	Unidentified	0.16
59.344	Unidentified + alpha-Bisabolol oxide B	0.26
59.621	Unidentified	0.08
59.753	Bulnesol	0.26
59.788	Unidentified	0.35
60.015	beta-Bisabolol	3.45
60.136	Unidentified	1.01

Chromatogram Sandalwood Oil-Barefut



Comments:

The analysis of this Sandalwood, Australia batch sample meets the expected chemical profile for authentic essential oil of *Santalum spicatum*. 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%
60.318	(Z)-alpha-Santalol	21.03
60.459	(Z)-alpha-Santalol	0.47
60.505	Unidentified	0.34
60.727	Unidentified	0.92
60.860	cis-alpha-Bisabolol	0.68
61.014	trans-alpha-Bisabolol + Z-alpha-trans-Bergam	7.88
61.380	Unidentified	2.05
61.571	Unidentified	0.17
61.710	Unidentified	0.30
61.814	epi-beta-Santalol	1.66
62.151	Unidentified	0.38
62.237	Unidentified	0.44
62.516	(2E,6E)-Farnesol + (Z)-beta-Santalol	10.42
62.769	Unidentified	0.22
62.977	(Z)-Nuciferol	14.96
63.356	Unidentified	0.12
63.628	Farnesal	0.12
63.744	(E)-beta-Santalol	0.26
63.913	Unidentified	1.25
64.028	Unidentified	0.54
64.262	Unidentified	1.27
64.368	Santalol acetate isomer	1.22
64.599	(E)-Nuciferol	7.11
64.815	Unidentified	0.12
64.929	(Z)-Lanceol	2.02
65.218	Santalol acetate isomer	0.55
65.352	Unidentified	0.34
65.575	Unidentified	0.15
65.677	E-alpha-trans-Bergamotol	0.22
65.851	Unidentified	0.10
65.973	Unidentified	0.51
66.066	Unidentified	0.08
66.542	Lanceol isomer	0.40
67.398	Unidentified	0.17
68.198	Unidentified	0.16
68.316	Unidentified	0.04
68.448	Unidentified	0.03
68.687	Farnesyl acetate	0.04
69.596	Unidentified	0.02
73.382	Unidentified	0.03
		100.00