

Sample Information

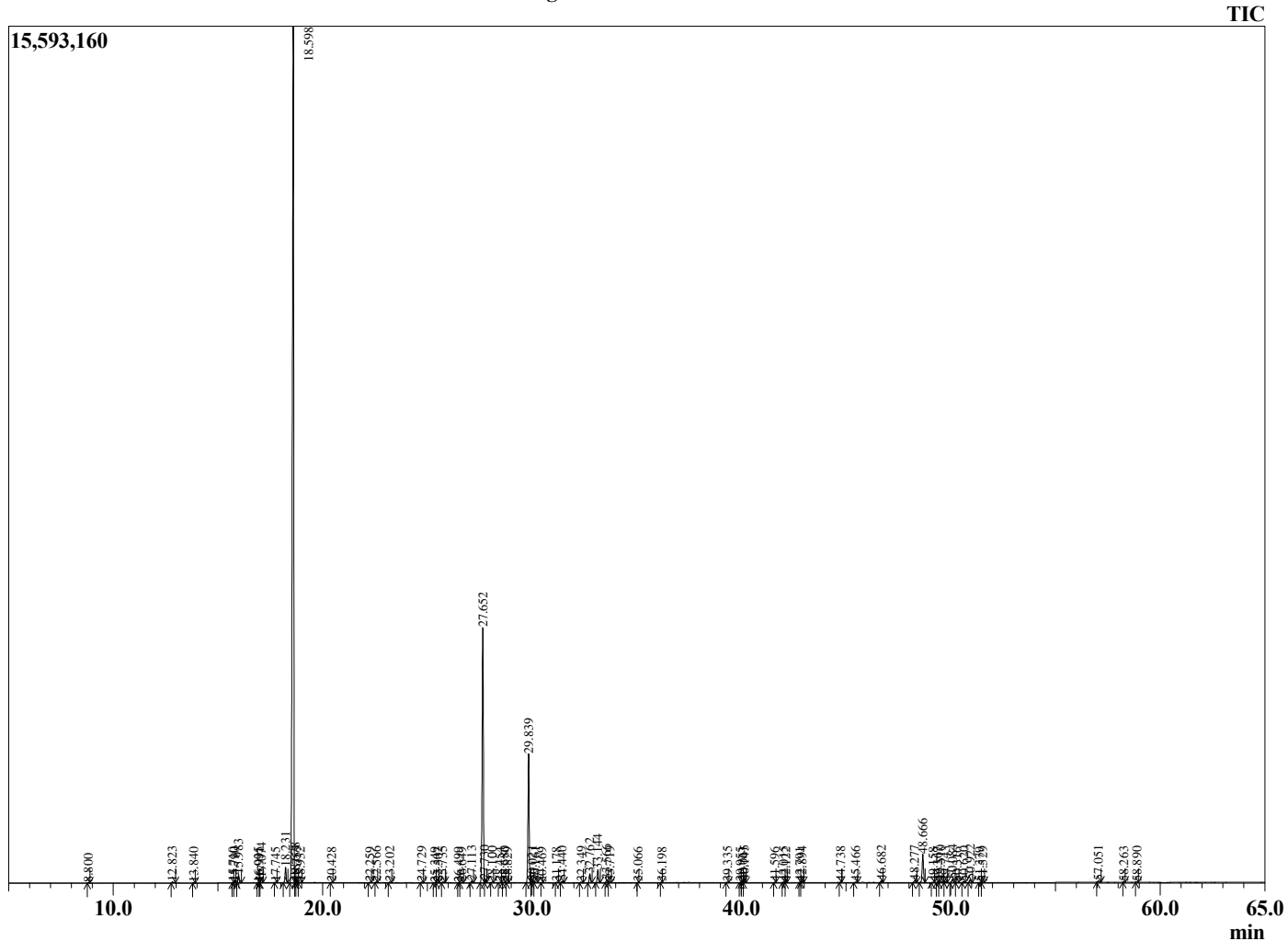
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 3/25/2021 3:39:22 AM
 Sample Type : Essential Oil
 Sample Name : Palo Santo Oil - Barefut
 Sample ID : 0104
 Injection Volume : 0.10
 Instrument ID : GC-3



Peak Report TIC

R.Time	Name	Area%
8.800	3-Methylcyclopentanone	0.02
12.823	alpha-Pinene	0.10
13.840	3-Methylcyclohexanone	0.02
15.710	Unidentified	0.03
15.790	Unidentified	0.03
15.983	Myrcene	0.46
16.935	Pseudolimonene	0.02
16.991	Unidentified	0.02
17.074	alpha-Phellandrene	0.28
17.745	alpha-Terpinene	0.02
18.231	para-Cymene	0.96
18.598	Limonene	65.11
18.678	beta-Phellandrene	0.21
18.755	1,8-Cineole	0.09
18.932	(Z)-beta-Ocimene	0.02
20.428	gamma-Terpinene	0.03
22.259	Terpinolene	0.03
22.566	para-Cymenene	0.03
23.202	Linalool	0.05
24.729	trans-para-Mentha-2,8-dien-1-ol	0.06
25.349	Unidentified	0.01
25.502	cis-Limonene oxide	0.02
25.735	trans-Limonene oxide	0.08
26.499	Camphor	0.01
26.649	trans-beta-Terpineol	0.04
27.113	Menthone	0.11
27.652	Menthofuran	17.17
27.730	Isomenthone	0.08
28.100	delta-Terpineol	0.04
28.454	(E)-Isopulegone	0.02
28.680	Unidentified	0.04
28.829	Terpinen-4-ol	0.02
29.839	alpha-Terpineol	8.67
30.021	(Z)-Dihydrocarvone	0.12
30.161	cis-Piperitol	0.07
30.469	(E)-Dihydrocarvone	0.01
31.178	Unidentified	0.03
31.440	trans-Carveol	0.11
32.349	cis-Carveol	0.05
32.762	Pulegone	0.60
33.144	Carvone	0.86
33.566	Geraniol	0.18
33.719	Unidentified	0.04
35.066	Unidentified	0.01
36.198	Unidentified	0.01
39.335	delta-Elementene	0.03
39.955	Unidentified	0.02
40.061	Menthylactone isomer	0.09
40.145	Menthylactone isomer	0.10
41.596	alpha-Ylangene	0.02
42.015	alpha-Copaene	0.06
42.122	Geranyl acetate	0.02
42.791	beta-Cubebene	0.01
42.894	beta-Elementene	0.07
44.738	beta-Ylangene	0.03
45.466	beta-Copaene	0.05
46.682	Unidentified	0.13
48.277	trans-Cadina-1(6),4-diene	0.16
48.666	Germacrene D	2.13
49.158	beta-Selinene	0.03
49.367	Unidentified	0.03
49.510	Menthylactone	0.15

Chromatogram Palo Santo Oil - Barefut



Comments:

The analysis of this Palo Santo batch sample meets the expected chemical profile for authentic essential oil of *Bursera graveolens*. 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%
49.743	alpha-Muurolene	0.06
50.084	(E,E)-alpha-Farnesene	0.26
50.316	beta-Bisabolene	0.04
50.620	gamma-Cadinene	0.08
50.922	delta-Cadinene	0.20
51.379	Unidentified	0.01
51.529	Unidentified	0.04
57.051	Humulane-1,6-dien-3-ol	0.11
58.263	Unidentified	0.03
58.890	alpha-Cadinol	0.04
		100.00