

Sample Information

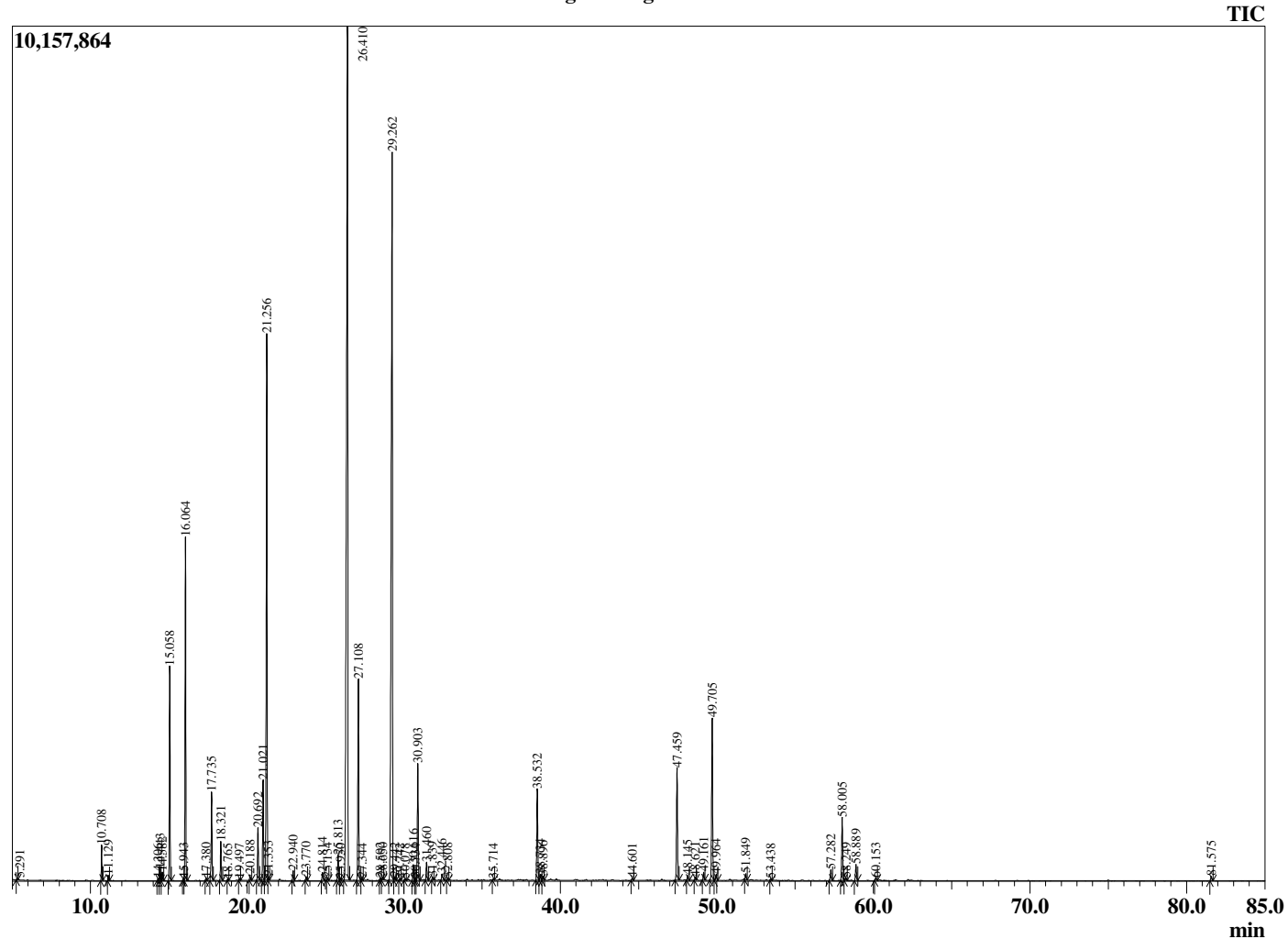
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 7/13/2020 9:23:54 AM
 Sample Type : Essential Oil
 Sample Name : Sage - BIOAROMA :
 Sample ID : BA18FAU
 Injection Volume : 0.10
 Instrument ID : GC-2



Peak Report TIC

R.Time	Name	Area%
5.291	3-Methylbutanal	0.02
10.708	cis-Salvene	0.54
11.129	trans-Salvene	0.08
14.306	Hashishene	0.04
14.443	Tricyclene	0.21
14.582	alpha-Thujene	0.15
15.058	alpha-Pinene	3.81
15.943	alpha-Fenchene	0.05
16.064	Camphene	6.24
17.380	Sabinene	0.05
17.735	beta-Pinene	1.78
18.321	Myrcene	0.73
18.765	3-Octanol	0.03
19.497	alpha-Phellandrene	0.03
20.188	alpha-Terpinene	0.10
20.692	para-Cymene	1.05
21.021	Limonene	2.12
21.256	1,8-cineole	11.41
21.353	cis-beta-Ocimene	0.06
22.940	gamma-Terpinene	0.20
23.770	trans-Sabinene hydrate	0.08
24.814	Terpinolene	0.19
25.134	para-Cymenene	0.05
25.813	Linalool	0.60
25.950	cis-Sabinene hydrate	0.03
26.410	alpha-Thujone	27.41
27.108	beta-Thujone	4.44
27.344	Unidentified	0.04
28.502	Thujanol isomer	0.05
28.650	trans-Sabinol	0.05
29.262	Camphor	22.27
29.442	Thujanol isomer	0.06
29.742	trans-beta-Terpineol	0.03
30.078	Pinocamphone	0.03
30.616	Thujanol isomer	0.36
30.734	delta-Terpineol	0.04
30.903	Borneol	2.62
31.460	Terpinen-4-ol	0.40
31.839	para-Cymen-8-ol	0.07
32.446	alpha-Terpineol	0.18
32.808	Unidentified	0.05
35.714	Unidentified	0.03
38.532	Bornyl acetate	2.07
38.734	trans-Sabinyl acetate	0.16
38.896	Unidentified	0.09
44.601	alpha-Copaene	0.06
47.459	beta-Caryophyllene	2.68
48.145	Unidentified	0.11
48.621	Aromadendrene	0.07
49.161	Unidentified	0.18
49.705	alpha-Humulene	3.99
49.964	Alloaromadendrene	0.16
51.849	Viridiflorene (Ledene)	0.15
53.438	delta-Cadinene	0.03
57.282	Caryophyllene oxide	0.28
58.005	Viridiflorol	1.56
58.249	Unidentified	0.06
58.889	Humulene epoxide II	0.39
60.153	Unidentified	0.06
81.575	Manool	0.11
		100.00

Chromatogram Sage - BIOAROMA



Comments:

The analysis of this Sage batch sample meets the expected chemical profile for authentic essential oil of *Salvia officinalis*. 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.

Sample Information

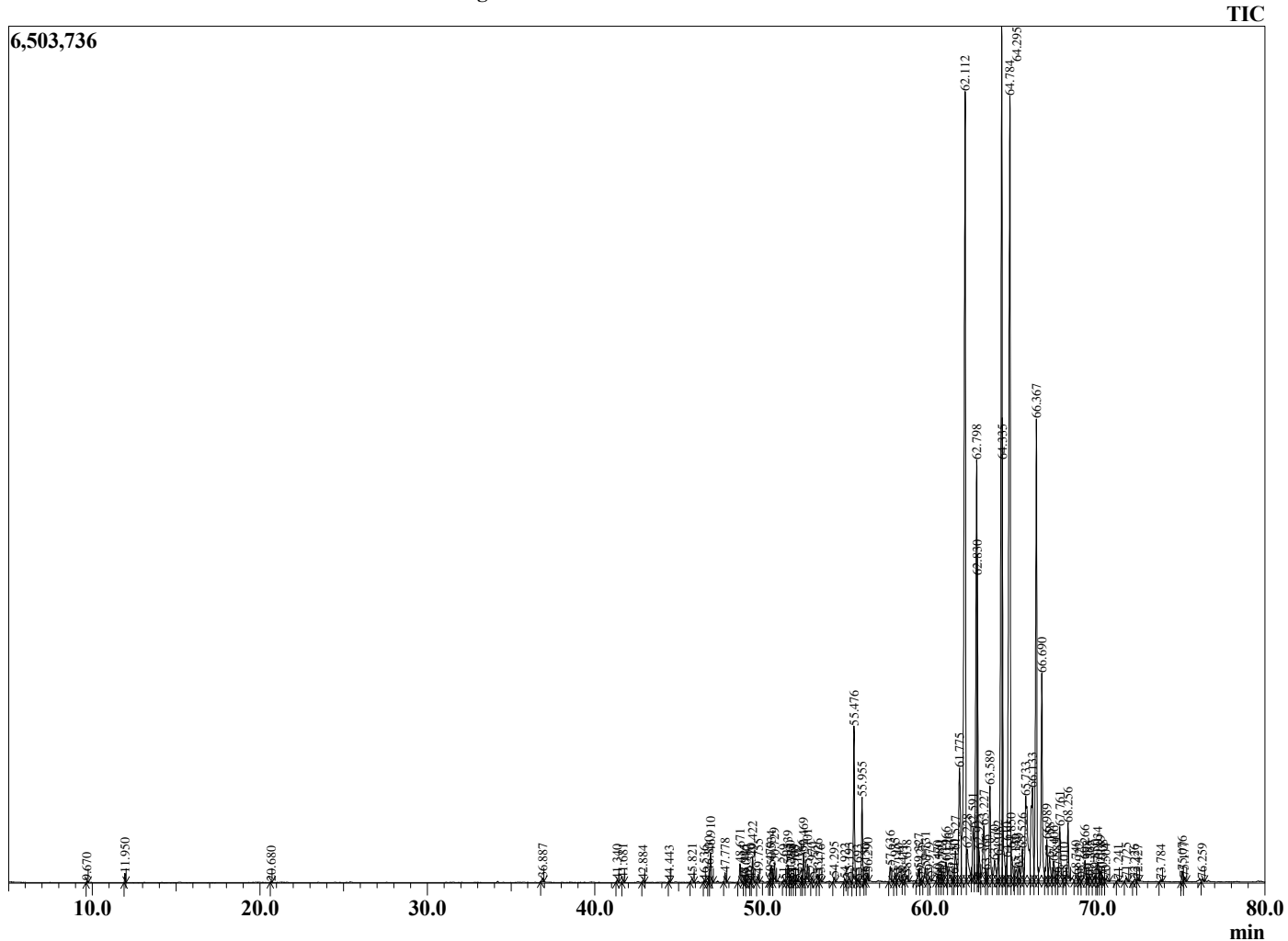
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 3/7/2021 3:57:44 AM
 Sample Type : Essential Oil
 Sample Name : Sandalwood Australian -
 Sample ID : BIOAROMA : BB22AZ
 Injection Volume : 0.10
 Instrument ID : GC-2



Peak Report TIC

R.Time	Name	Area%
9.670	Furfural	0.02
11.950	Santene	0.08
20.680	Limonene	0.01
36.887	Teresantalic acid	0.05
41.340	delta-Elementene	0.03
41.681	Unidentified	0.04
42.884	Unidentified	0.03
44.443	Unidentified	0.02
45.821	Unidentified + 7-epi-Sesquithujene	0.07
46.536	cis-alpha-Bergamotene	0.02
46.830	alpha-Cedrene	0.11
46.910	alpha-Santalene	0.42
47.778	trans-alpha-Bergamotene	0.12
48.671	epi-beta-Santalene	0.26
48.945	(Z)-beta-Farnesene	0.04
49.040	Unidentified	0.01
49.320	(E)-beta-Farnesene	0.04
49.422	beta-Santalene	0.35
49.755	alpha-Acoradiene	0.11
50.470	beta-Acoradiene	0.03
50.534	gamma-Curcumene	0.21
50.729	Ar-Curcumene	0.26
51.269	Unidentified	0.03
51.539	Unidentified	0.25
51.660	Unidentified	0.08
51.725	Unidentified	0.03
51.908	cis-alpha-Bisabolene	0.02
52.102	(E,E)-alpha-Farnesene	0.03
52.366	beta-Bisabolene	0.08
52.469	beta-Curcumene	0.41
52.701	Sesquiceneole	0.31
52.970	Unidentified	0.06
53.326	beta-Sesquiphellandrene	0.11
53.476	Unidentified	0.04
54.295	(E)-alpha-Bisabolene	0.06
54.922	Unidentified	0.04
55.193	Unidentified	0.06
55.476	(E)-Nerolidol	2.10
55.693	Unidentified	0.03
55.955	Dendralasin	1.13
56.130	Unidentified	0.04
56.290	Unidentified	0.11
57.636	Guaiol	0.22
57.935	Unidentified	0.12
58.140	alpha-Santalene	0.06
58.411	Unidentified	0.02
58.638	Unidentified	0.10
59.327	Unidentified	0.22
59.425	Unidentified	0.03
59.731	alpha-Acorenol	0.25
59.979	beta-Acorenol	0.07
60.470	Unidentified	0.09
60.580	Unidentified	0.08
60.721	Unidentified	0.10
60.966	Unidentified	0.37
61.146	Unidentified	0.29
61.450	Unidentified	0.06
61.527	Bulnesol	0.66
61.775	beta-Bisabolol	2.60
62.112	(Z)-alpha-Santalol	15.57
62.228	(Z)-alpha-Santalal	0.86
62.591	Unidentified	0.97

Chromatogram Sandalwood Australian - BIOAROMA



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%
62.798	epi-alpha-Bisabolol	6.73
62.830	(Z)-alpha-trans-Bergamotol	2.57
62.925	Unidentified	0.34
63.227	(E)-alpha-Santalol	1.26
63.366	Unidentified	0.15
63.589	(Z)-epi-beta-Santalol	1.63
63.870	(E)-alpha-trans-Bergamotol	0.55
64.082	Unidentified	0.38
64.295	(2E,6E)-Farnesol	14.06
64.335	(Z)-beta-Santalol	2.83
64.610	Unidentified	0.26
64.784	(Z)-Nuciferol	15.28
64.850	Unidentified	0.53
65.149	Unidentified	0.30
65.339	Farnesal	0.23
65.526	(E)-beta-Santalol	0.58
65.733	Unidentified	3.08
66.133	Unidentified + Santalol acetate isomer	2.47
66.367	(E)-Nuciferol	7.29
66.690	cis-Lanceol	3.54
66.989	Unidentified	0.77
67.158	Unidentified	0.50
67.406	Unidentified	0.35
67.589	Lanceol isomer	0.13
67.761	Unidentified	1.09
68.010	Unidentified	0.11
68.256	Lanceol isomer	0.89
68.740	Unidentified	0.12
68.922	Unidentified	0.06
69.266	Unidentified	0.38
69.398	Unidentified	0.09
69.565	Unidentified	0.10
69.850	Unidentified	0.11
70.034	Unidentified	0.39
70.189	Unidentified	0.17
70.308	Farnesyl acetate	0.09
70.504	Unidentified	0.06
71.241	Unidentified	0.02
71.725	Unidentified	0.06
72.226	Unidentified	0.04
72.427	Unidentified	0.03
73.784	Unidentified	0.03
75.076	Unidentified	0.15
75.177	Unidentified	0.07
76.259	Unidentified	0.04
		100.00

Sample Information

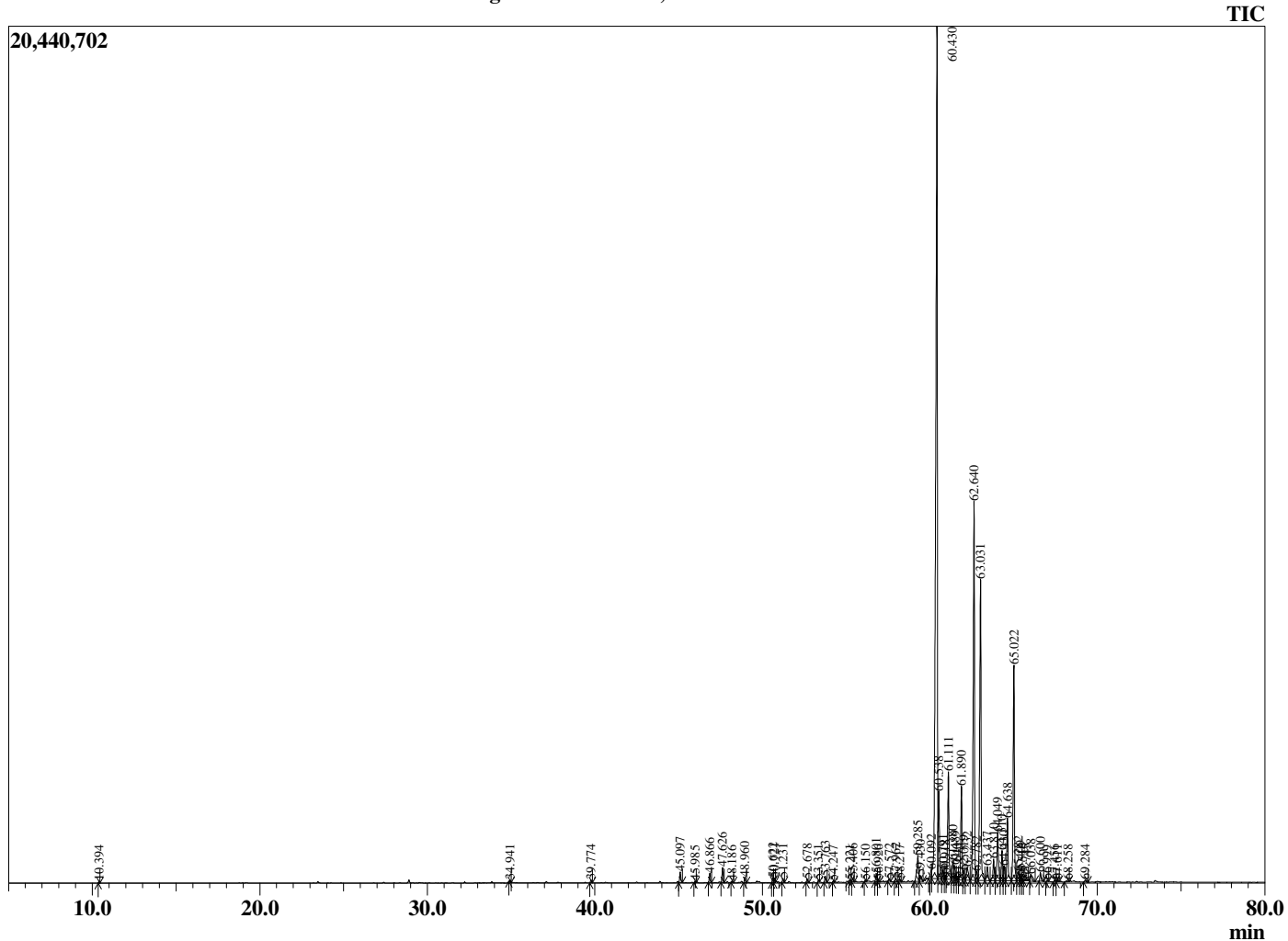
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 7/12/2020 11:49:53 PM
 Sample Type : Essential Oil
 Sample Name : Sandalwood, Hawaii -BIOAROMA
 Sample ID : BA18FAW
 Injection Volume : 0.10
 Instrument ID: : GC-3



Peak Report TIC

R.Time	Name	Area%
10.394	Santene	0.04
34.941	Unidentified	0.05
39.774	Unidentified	0.08
45.097	alpha-Santalene	0.34
45.985	trans-alpha-Bergamotene	0.04
46.866	epi-beta-Santalene	0.28
47.626	beta-Santalene	0.44
48.186	Unidentified	0.04
48.960	Ar-Curcumene	0.17
50.622	beta-Bisabolene	0.15
50.721	beta-Curcumene	0.14
51.231	alpha-Teresantalic acid	0.12
52.678	alpha-Ekasantalic acid	0.10
53.351	Santalic acid	0.07
53.763	trans-Nerolidol	0.19
54.247	Dendralasin	0.04
55.221	Unidentified	0.04
55.406	Unidentified	0.10
56.150	Unidentified	0.06
56.801	Unidentified	0.27
56.926	Unidentified	0.05
57.572	Unidentified	0.09
57.962	alpha-Acorenol	0.11
58.217	Unidentified	0.08
59.285	alpha-Bisabolol oxide B	1.19
59.430	Unidentified	0.30
60.092	beta-Bisabolol	0.34
60.430	(Z)-alpha-Santalol	39.14
60.538	Santalal isomer	3.00
60.791	Unidentified	0.30
60.918	alpha-Bisabolol	0.12
61.111	Z-alpha-trans-Bergamotol	4.09
61.380	Unidentified	0.69
61.489	Unidentified	0.48
61.640	Unidentified	0.03
61.890	(Z)-epi-beta-Santalol	3.23
62.019	Unidentified	0.29
62.232	(E)-alpha-Santalol	0.72
62.640	(Z)-beta-Santalol	13.94
62.782	Unidentified	0.35
63.031	(Z)-Nuciferol	11.76
63.437	Unidentified	0.63
63.810	(E)-beta-Santalol	0.80
64.049	Unidentified	2.07
64.310	Unidentified	1.12
64.430	Unidentified	0.48
64.638	(E)-Nuciferol	2.27
65.022	(Z)-Lanceol	7.90
65.282	Santalol acetate isomer	0.42
65.409	Unidentified	0.16
65.516	Unidentified	0.09
65.745	Unidentified	0.10
66.038	Unidentified	0.27
66.600	Lanceol isomer	0.28
66.999	Unidentified	0.05
67.456	Unidentified	0.07
67.611	Unidentified	0.07
68.258	Unidentified	0.11
69.284	Unidentified	0.08
		100.00

Chromatogram Sandalwood, Hawaii - BIOAROMA



Comments:

The analysis of this Sandalwood, Hawaii batch sample meets the expected chemical profile for authentic essential oil of *Santalum paniculatum*. 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.

Sample Information

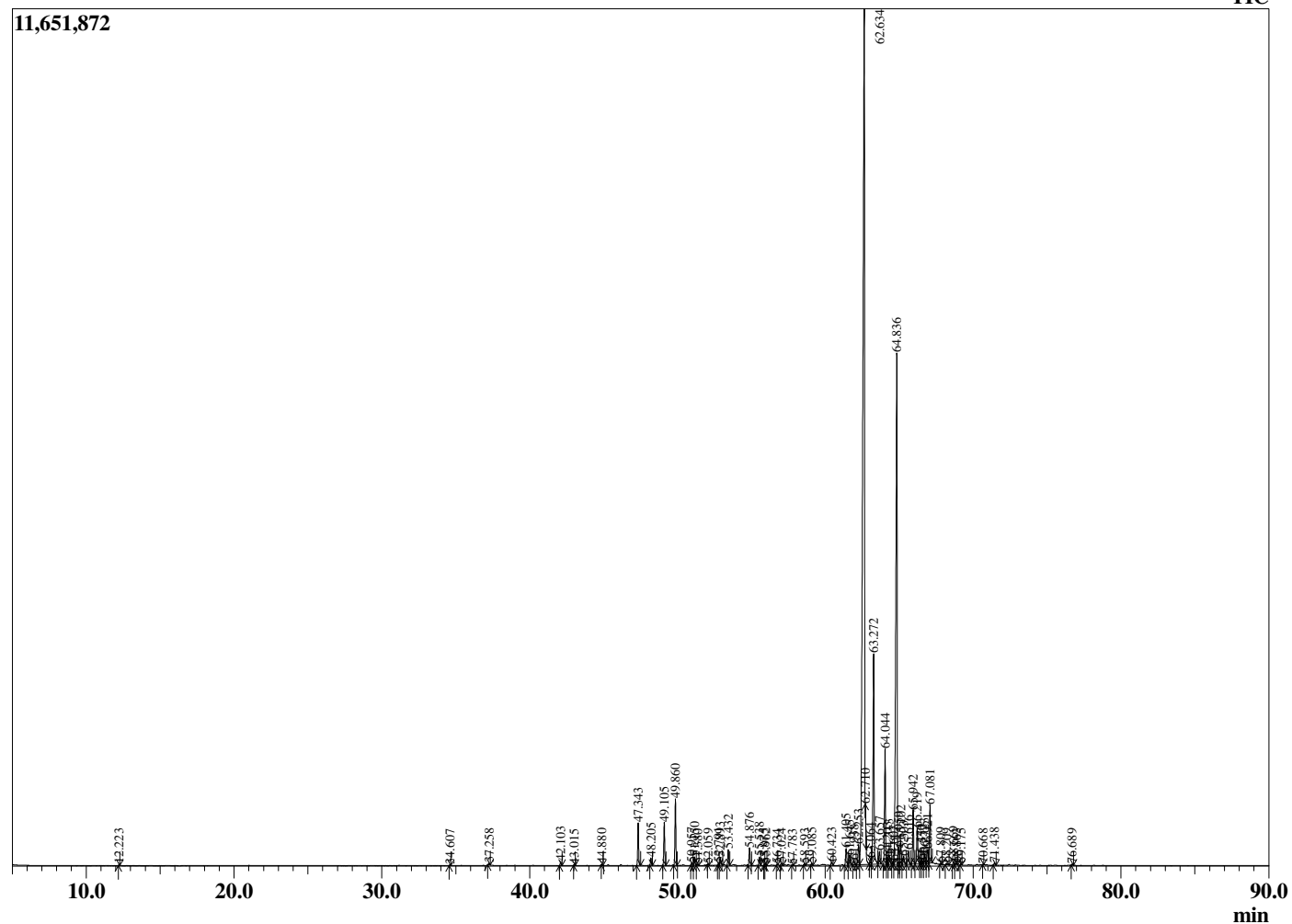
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 7/12/2020 11:36:54 AM
 Sample Type : Essential Oil
 Sample Name : Sandalwood, India -
 Sample ID : BIOAROMA : BA18FAV
 Injection Volume : 0.10
 Instrument ID : GC-2



Peak Report TIC

R.Time	Name	Area%
12.223	Santene	0.03
34.607	Unidentified	0.02
37.258	Unidentified	0.05
42.103	Unidentified	0.12
43.015	Unidentified	0.02
44.880	Unidentified	0.02
47.343	alpha-Santalene	1.20
48.205	trans-alpha-Bergamotene	0.21
49.105	epi-beta-Santalene	1.23
49.860	beta-Santalene	1.88
50.957	gamma-Curcumene	0.07
51.150	Ar-Curcumene	0.23
51.380	Unidentified	0.03
52.059	tricyclo-eka-Santallic acid	0.02
52.791	beta-Bisabolene	0.07
52.893	beta-Curcumene	0.27
53.432	alpha-Teresantallic acid	0.45
54.876	alpha-Ekasantallic acid	0.55
55.538	Santallic acid	0.24
55.875	trans-Nerolidol	0.03
55.962	Unidentified	0.05
56.734	Unidentified	0.02
57.024	trans-Sesquisabinene hydrate	0.06
57.783	Unidentified	0.02
58.593	Unidentified	0.05
59.085	Unidentified	0.06
60.423	alpha-Acorenol	0.12
61.405	Khusilal	0.62
61.645	(E)-alpha-Santalal	0.38
61.938	(Z)-alpha-Santalal	0.15
62.253	Unidentified	0.80
62.634	(Z)-alpha-Santalol	49.33
62.710	Unidentified	0.14
63.064	Unidentified	0.09
63.272	Z-alpha-trans-Bergamotol	7.02
63.657	(E)-alpha-Santalol	0.44
64.044	epi-beta-Santalol	3.53
64.203	Unidentified	0.24
64.313	E-alpha-trans-Bergamotol	0.44
64.607	(2E,6E)-Farnesol	0.08
64.836	(Z)-beta-Santalol	21.18
64.959	Unidentified	0.54
65.102	(Z)-Nuciferol	0.78
65.303	(E)-epi-beta-Santalol	0.38
65.616	Unidentified	0.50
65.942	(E)-beta-Santalol	1.60
66.219	Unidentified	1.33
66.470	Unidentified	0.12
66.552	Unidentified	0.11
66.723	(E)-Nuciferol	0.30
66.921	Unidentified	0.53
67.081	cis-Lanceol	1.79
67.809	Santalol acetate isomer	0.05
68.209	Unidentified	0.08
68.669	Lanceol isomer	0.10
68.863	Unidentified	0.07
69.175	Unidentified	0.04
70.668	Unidentified	0.01
71.438	Unidentified	0.07
76.689	Unidentified	0.04
		100.00

Chromatogram Sandalwood, India - BIOAROMA



Comments:

The analysis of this Sandalwood, India batch sample meets the expected chemical profile for authentic essential oil of *Santalum album*. 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.

Sample Information

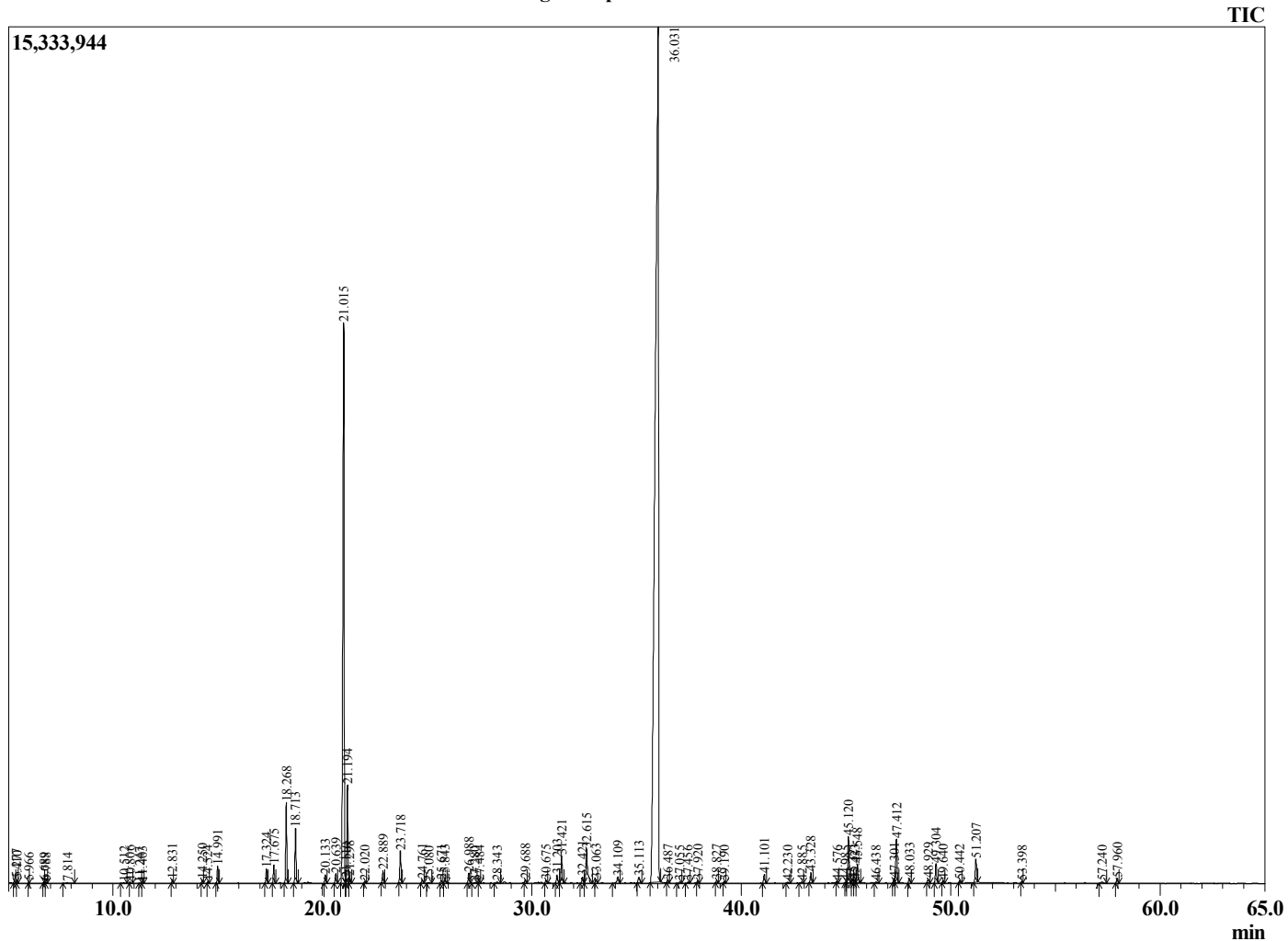
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 10/20/2020 6:30:27 PM
 Sample Type : Essential Oil
 Sample Name : Spearmint -
 Sample ID : BIOAROMA : BA29IAP
 Injection Volume : 0.10
 Instrument ID : GC-2



Peak Report TIC

R.Time	Name	Area%
5.277	3-Methylbutanal	0.06
5.410	2-Methylbutanal	0.04
5.966	2-Ethylfuran	0.02
6.689	3-Methylbutanol	0.02
6.788	2-Methylbutanol	0.01
7.814	Methyl-2-methylbutyrate	0.02
10.512	Ethyl-2-methylbutyrate	0.01
10.806	(Z)-3-Hexenol	0.02
11.247	(E)-2-Hexenol	0.01
11.403	n-Hexanol	0.01
12.831	2,5-Diethyltetrahydrofuran	0.07
14.250	Hashishene	0.08
14.524	alpha-Thujene	0.04
14.991	alpha-Pinene	0.38
17.324	Sabinene	0.33
17.675	beta-Pinene	0.43
18.268	Myrcene	1.89
18.713	3-Octanol	1.30
20.133	alpha-Terpinene	0.21
20.639	para-Cymene	0.25
21.015	Limonene	17.09
21.110	beta-Phellandrene	0.08
21.194	1,8-Cineole	2.30
21.298	(Z)-beta-Ocimene	0.14
22.020	(E)-beta-Ocimene	0.04
22.889	gamma-Terpinene	0.31
23.718	trans-Sabinene hydrate	0.81
24.761	Terpinolene	0.09
25.080	para-Cymenene	0.03
25.671	Linalool	0.06
25.843	cis-Sabinene hydrate	0.08
26.988	3-Octyl acetate	0.26
27.280	trans-p-Mentha-2,8-dienol	0.03
27.484	cis-p-Menth-2-en-1-ol	0.04
28.343	trans-Limonene oxide	0.06
29.688	Menthone	0.09
30.675	Unidentified	0.07
31.203	Menthol	0.25
31.421	Terpinen-4-ol	0.75
32.421	alpha-Terpineol	0.20
32.615	cis-Dihydrocarvone	1.31
33.063	trans-Dihydrocarvone	0.10
34.109	trans-Carveol	0.23
35.113	cis-Carveol	0.21
36.031	Carvone	63.83
36.487	Piperitone	0.07
37.055	Unidentified	0.03
37.456	Unidentified	0.03
37.920	Carvone oxide	0.05
38.827	Menthyl acetate	0.06
39.190	Dihydroedulan I	0.04
41.101	trans-Dihydrocarvyl acetate	0.25
42.230	Unidentified	0.03
42.885	Eugenol	0.04
43.328	cis-Carvyl acetate	0.29
44.576	alpha-Copaene	0.04
44.985	Unidentified	0.02
45.120	beta-Bourbonene	1.37
45.321	alpha-Bourbonene	0.09
45.423	trans-beta-Elementene	0.07
45.548	(Z)-Jasmone	0.54
46.438	cis-beta-Caryophyllene	0.04

Chromatogram Spearmint - BIOAROMA



Comments:

The analysis of this Spearmint batch sample meets the expected chemical profile for authentic essential oil of *Mentha spicata*. 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%
47.301	beta-Ylangene	0.12
47.412	trans-beta-Caryophyllene	1.33
48.033	beta-Copaene	0.13
48.929	Isogermacrene D	0.11
49.304	(E)-beta-Farnesene	0.56
49.640	alpha-Humulene	0.05
50.442	cis-Muurola-4(14),5-diene	0.07
51.207	Germacrene D	0.70
53.398	delta-Cadinene	0.03
57.240	Caryophyllene oxide	0.06
57.960	Viridiflorol	0.14
		100.00

Sample Information

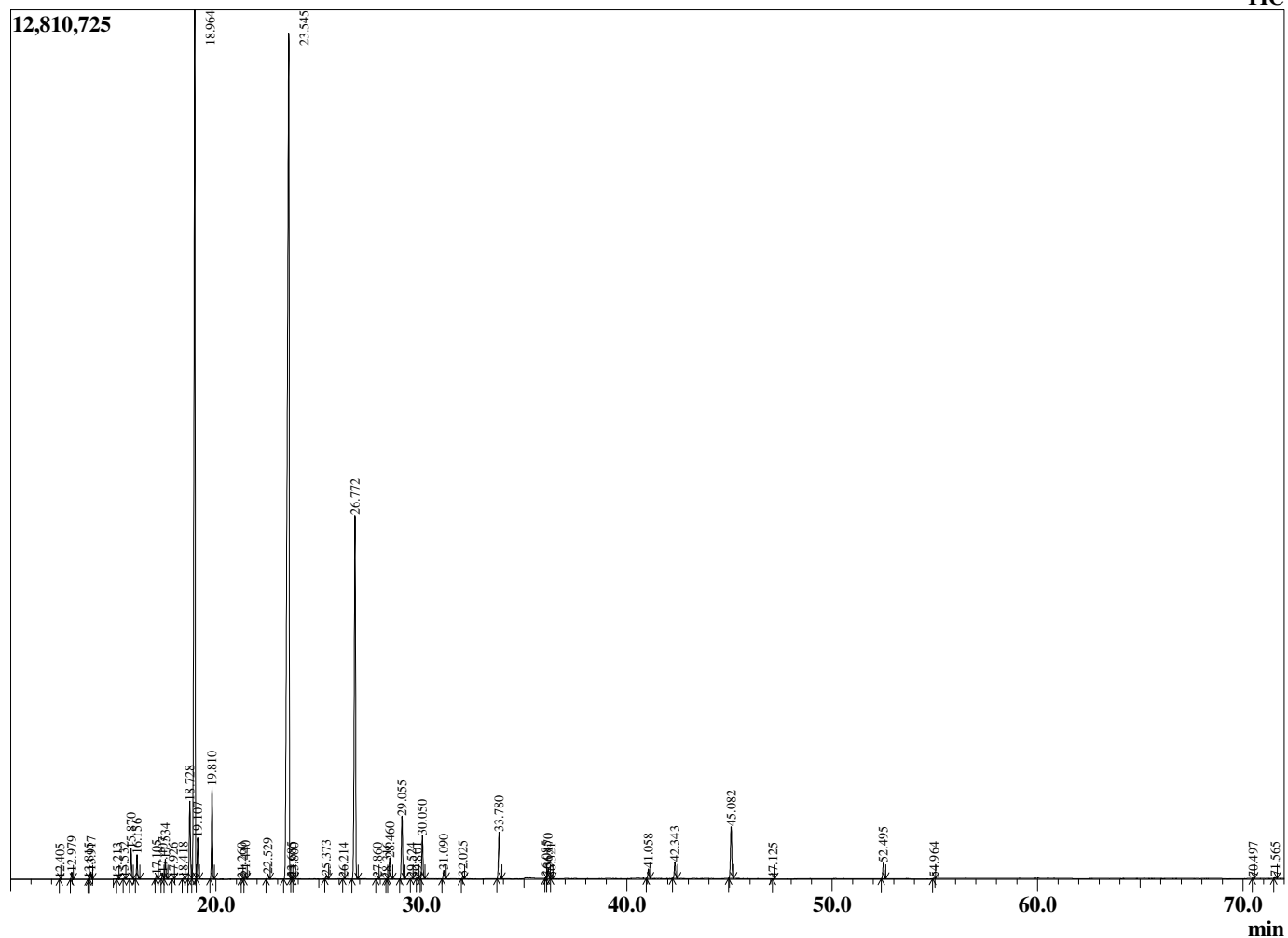
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 10/18/2020 2:59:08 AM
 Sample Type : Essential Oil
 Sample Name : Spike Lavender -
 Sample ID : BIOAROMA : BA29IAC
 Injection Volume : 0.10
 Instrument ID : GC-3



Peak Report TIC

R.Time	Name	Area%
12.405	Tricyclene	0.00
12.979	alpha-Pinene	0.17
13.815	alpha-Fenchene	0.00
13.917	Camphene	0.18
15.213	Sabinene	0.01
15.532	beta-Pinene	0.02
15.870	3-Octanone	0.76
16.156	Myrcene	0.63
17.105	Pseudolimonene	0.09
17.407	delta-3-Carene	0.16
17.534	Hexyl acetate	0.52
17.926	alpha-Terpinene	0.01
18.418	para-Cymene	0.02
18.728	Limonene	2.37
18.964	1,8-cineole	27.10
19.107	(Z)-beta-Ocimene	1.07
19.810	(E)-beta-Ocimene	2.50
21.260	Unidentified	0.01
21.440	cis-Linalool oxide (furanoid)	0.07
22.529	trans-Linalool oxide (furanoid)	0.14
23.545	Linalool	42.44
23.685	Hotrienol	0.04
23.800	Unidentified	0.01
25.373	allo-Ocimene	0.09
26.214	neo-allo-Ocimene	0.01
26.772	Camphor	12.36
27.860	Isoborneol	0.02
28.316	Unidentified	0.01
28.460	Borneol	0.63
29.055	Terpinen-4-ol	1.92
29.524	Unidentified	0.01
29.801	Unidentified	0.02
30.050	alpha-Terpineol	1.31
31.090	Octyl acetate	0.26
32.025	Nerol	0.07
33.780	Linalyl acetate	1.45
36.085	Lavandulyl acetate	0.04
36.170	Bornyl acetate	0.31
36.321	Isobornyl acetate	0.00
41.058	Neryl acetate	0.30
42.343	Geranyl acetate	0.53
45.082	beta-Caryophyllene	1.75
47.125	(E)-beta-Farnesene	0.01
52.495	trans-alpha-Bisabolene	0.52
54.964	Caryophyllene oxide	0.02
70.497	Unidentified	0.01
71.565	Unidentified	0.04
		100.00

Chromatogram Spike Lavender - BIOAROMA



Comments:

The analysis of this Spike Lavender batch sample meets the expected chemical profile for authentic essential oil of *Lavandula latifolia*. 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.

Sample Information

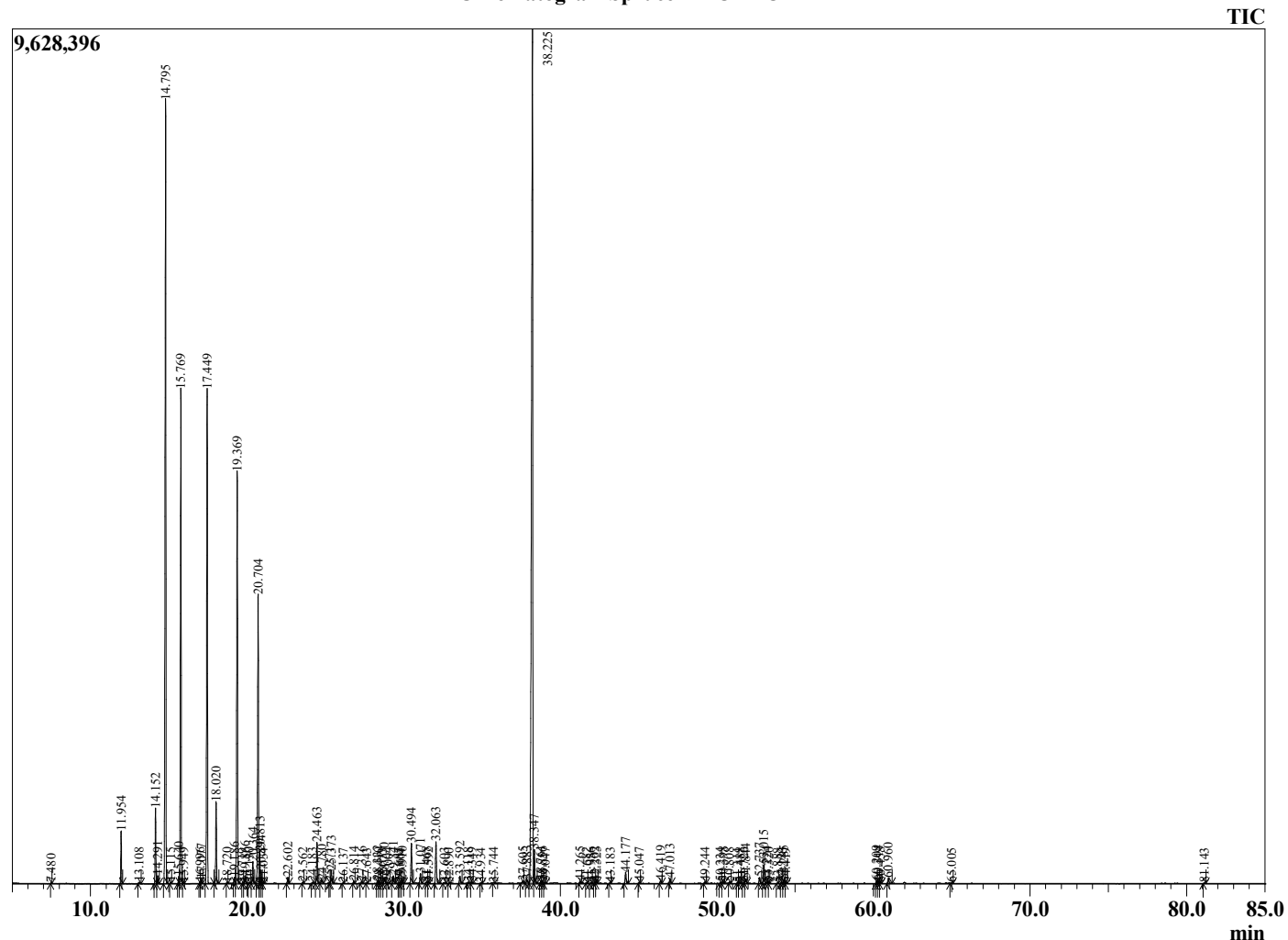
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 3/7/2021 5:56:10 AM
 Sample Type : Essential Oil
 Sample Name : Spruce -
 Sample ID : BIOAROMA :
 Injection Volume : BB22AAB
 Instrument ID : 0.10
 : GC-2



Peak Report TIC

R.Time	Name	Area%
7.480	Toluene	0.01
11.954	Santene	0.93
13.108	Unidentified	0.04
14.152	Tricyclene	1.44
14.291	alpha-Thujene	0.16
14.795	alpha-Pinene	17.85
15.115	beta-Fenchene	0.02
15.640	alpha-Fenchene	0.15
15.769	Camphene	10.46
15.949	Thuja-2,4(10)diene	0.02
16.996	Unidentified	0.03
17.077	Sabinene	0.10
17.449	beta-Pinene	10.84
18.020	Myrcene	1.69
18.720	2-Carene	0.02
19.186	alpha-Phellandrene	0.13
19.369	delta-3-Carene	9.49
19.719	1,4-Cineole	0.01
19.866	alpha-Terpinene	0.17
20.130	Unidentified	0.02
20.364	para-Cymene	0.49
20.704	Limonene	6.57
20.813	beta-Phellandrene	0.65
20.894	1,8-Cineole	0.27
21.034	trans-beta-Ocimene	0.01
22.602	gamma-Terpinene	0.14
23.562	Pinol	0.02
24.183	Isoterpinolene	0.03
24.463	Terpinolene	0.94
24.780	para-Cymenene	0.12
25.271	alpha-Campholenal isomer	0.03
25.373	Linalool	0.33
26.137	Unidentified	0.01
26.814	alpha-Fenchol	0.06
27.316	alpha-Campholenal	0.06
27.643	Unidentified	0.02
28.332	trans-Pinocarveol	0.09
28.410	Unidentified	0.02
28.633	trans-Verbenol	0.02
28.770	Camphor	0.17
29.004	Citronellal	0.03
29.341	trans-beta-Terpineol	0.19
29.685	Pinocamphone	0.01
29.804	Unidentified	0.02
29.910	Isoborneol	0.06
30.494	Borneol	0.99
31.071	Terpinen-4-ol	0.26
31.468	para-Cymen-8-ol	0.05
31.592	Unidentified	0.02
32.063	alpha-Terpineol	1.09
32.603	Unidentified	0.04
32.890	Verbenone	0.01
33.592	alpha-Fenchyl acetate	0.19
34.118	Citronellol	0.04
34.349	Thymol methyl ether	0.03
34.934	Unidentified	0.02
35.744	Geraniol	0.02
37.605	Chrysanthenyl acetate	0.07
37.883	Unidentified	0.10
38.225	Bornyl acetate	29.81
38.347	Isobornyl acetate	0.75
38.761	Unidentified	0.07

Chromatogram Spruce - BIOAROMA



Comments:

The analysis of this Black Spruce batch sample meets the expected chemical profile for authentic essential oil of *Picea mariana*. 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%
38.856	Unidentified	0.05
39.047	Unidentified	0.03
41.265	delta-Elemene	0.06
41.682	Unidentified	0.02
41.956	Unidentified	0.02
42.202	alpha-Terpinyl acetate	0.04
42.323	Citronellyl acetate	0.05
43.183	Unidentified	0.02
44.177	Geranyl acetate	0.30
45.047	beta-Elemene	0.03
46.419	Junipene	0.08
47.013	beta-Caryophyllene	0.13
49.244	alpha-Humulene	0.05
50.234	10-beta-H-Cadina-1(6),4-diene	0.04
50.398	trans-Cadina-1(6),4-diene	0.06
50.808	Germacrene D	0.03
51.314	beta-Selinene	0.02
51.488	Unidentified	0.03
51.726	Selina-4(15),7(11)-diene	0.04
51.844	alpha-Murolene	0.13
52.737	gamma-Cadinene	0.16
53.015	delta-Cadinene	0.50
53.224	trans-Calamenene	0.07
53.320	Zonarene	0.02
53.888	trans-Cadine-1,4-diene	0.02
54.124	alpha-Cadinene	0.04
54.285	trans-alpha-Bisabolene	0.09
54.419	Unidentified	0.02
60.209	tau-Cadinol	0.07
60.314	epi-alpha-Cadinol	0.08
60.458	delta-Cadinol	0.02
60.960	alpha-Cadinol	0.15
65.005	Unidentified	0.02
81.143	Manool	0.02
		100.00

Sample Information

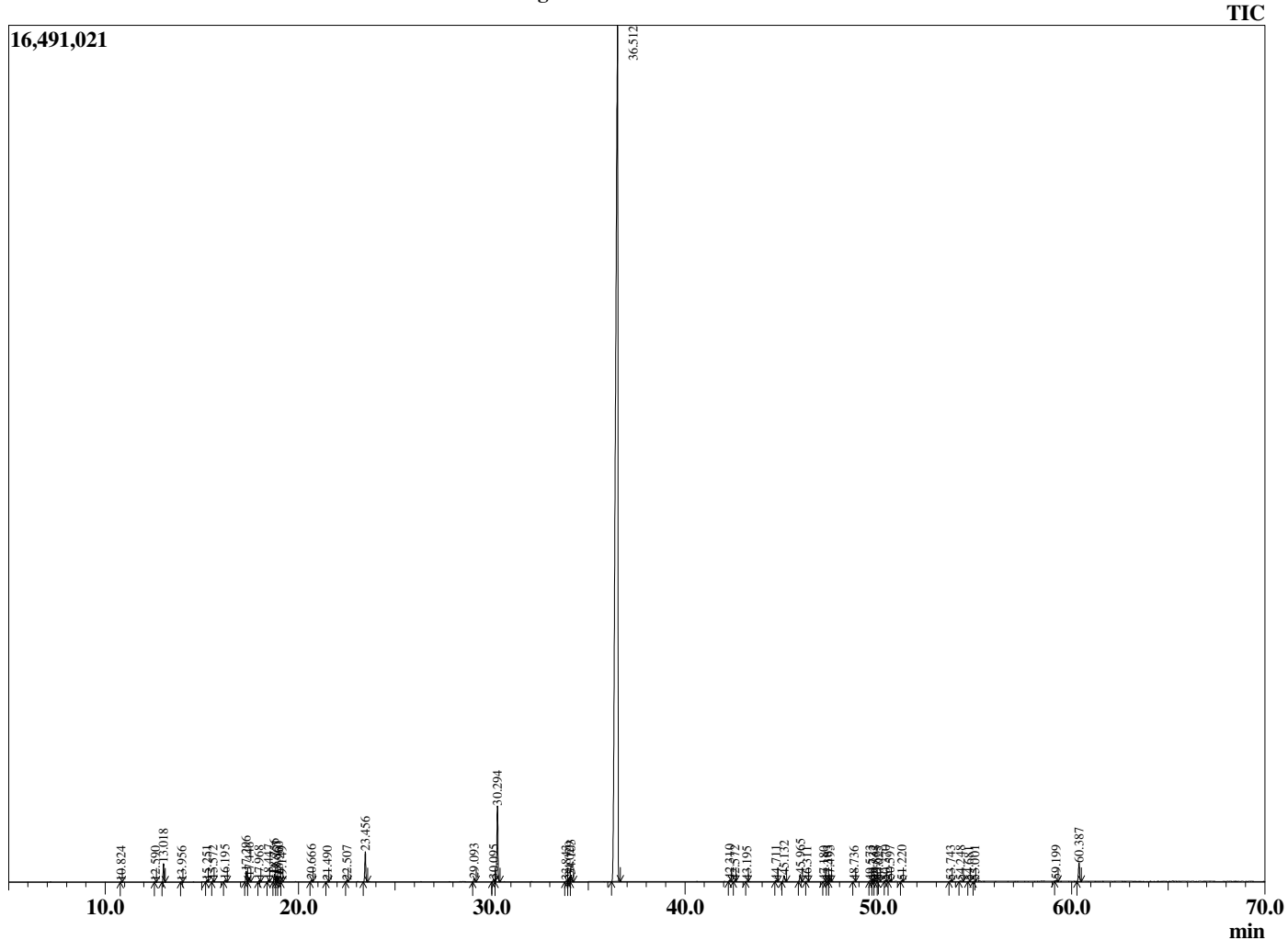
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 8/31/2020 8:46:49 PM
 Sample Type : Essential Oil
 Sample Name : Star Anise -
 Sample ID : BIOAROMA : BA08GW
 Injection Volume : 0.10
 Instrument ID : GC-3



Peak Report TIC

R.Time	Name	Area%
3.783	2-Methyl 3-buten-2-ol	0.01
10.824	Styrene	0.01
12.590	alpha-Thujene	0.01
13.018	alpha-Pinene	0.68
13.956	Camphene	0.01
15.251	Sabinene	0.04
15.572	beta-Pinene	0.06
16.195	Myrcene	0.08
17.296	alpha-Phellandrene	0.43
17.446	delta-3-Carene	0.17
17.968	alpha-Terpinene	0.06
18.447	para-Cymene	0.07
18.756	Limonene	0.30
18.867	beta-Phellandrene	0.26
18.960	1,8-Cineole	0.22
19.149	cis-beta-Ocimene	0.01
20.666	gamma-Terpinene	0.07
21.490	cis-Linalool oxide (furanoid)	0.03
22.507	Terpinolene	0.05
23.456	Linalool	1.33
29.093	Terpinen-4-ol	0.15
30.095	alpha-Terpineol	0.11
30.294	Estragole	3.63
33.843	Geraniol	0.03
34.029	(Z)-Anethole	0.22
34.103	para-Anisaldehyde	0.34
36.512	(E)-Anethole	89.22
42.310	alpha-Copaene	0.07
42.572	para-Acetonylanisole	0.03
43.195	beta-Elemene	0.02
44.711	cis-alpha-Bergamotene	0.04
45.132	beta-Caryophyllene	0.32
45.965	trans-alpha-Bergamotene	0.37
46.311	Aromadendrene	0.02
47.180	trans-beta-Farnesene	0.02
47.383	alpha-Humulene	0.03
47.493	Unidentified	0.04
48.736	Unidentified	0.02
49.573	Viridiflorene (Ledene)	0.02
49.732	trans-Methyl isoeugenol	0.02
49.863	Bicyclogermacrene	0.07
50.025	Unidentified	0.02
50.370	(E,E)-alpha-Farnesene	0.04
50.597	beta-Bisabolene	0.05
51.220	delta-Cadinene	0.05
53.743	trans-Nerolidol	0.04
54.248	Unidentified	0.04
54.681	Unidentified	0.02
55.001	Unidentified	0.03
59.199	alpha-Cadinol	0.05
60.387	Foeniculin	0.98
		100.00

Chromatogram Star Anise - BIOAROMA



Comments:

The analysis of this Star Anise batch sample meets the expected chemical profile for authentic essential oil of *Illicium verum*. 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.

Sample Information

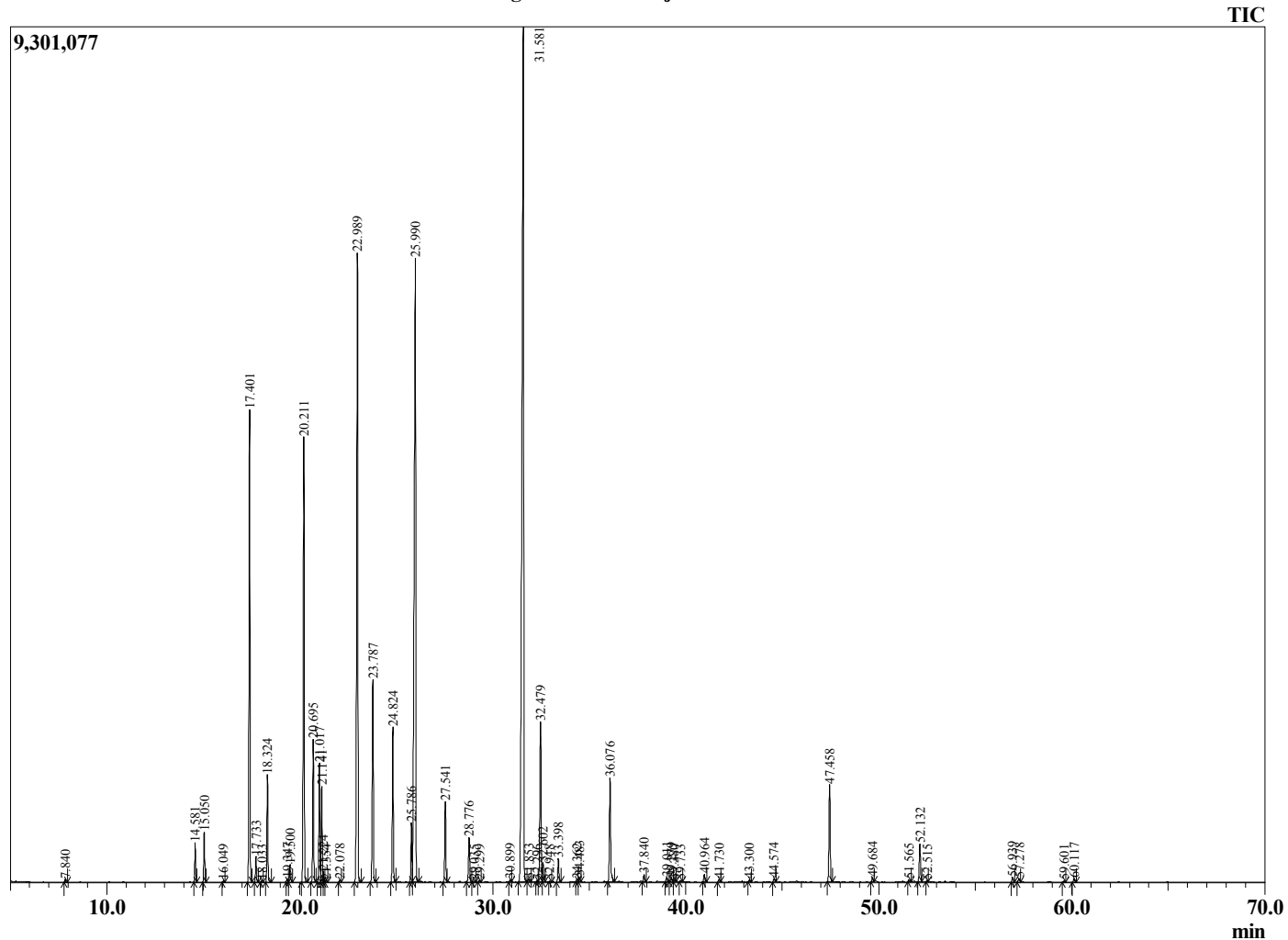
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 7/13/2020 11:22:40 AM
 Sample Type : Essential Oil
 Sample Name : Sweet Marjoram -
 Sample ID : BIOAROMA : BA18FAY
 Injection Volume : 0.10
 Instrument ID : GC-2



Peak Report TIC

R.Time	Name	Area%
7.840	Methyl-2-methylbutyrate	0.03
14.581	alpha-Thujene	0.59
15.050	alpha-Pinene	0.76
16.049	Camphene	0.03
17.401	Sabinene	7.80
17.733	beta-Pinene	0.42
18.033	3-Octanone	0.03
18.324	Myrcene	1.78
19.347	Pseudolimonene	0.06
19.500	alpha-Phellandrene	0.30
20.211	alpha-Terpinene	7.77
20.695	para-Cymene	2.41
21.017	Limonene	2.06
21.141	beta-Phellandrene	1.63
21.224	1,8-Cineole	0.14
21.354	(Z)-beta-Ocimene	0.03
22.078	(E)-beta-Ocimene	0.04
22.989	gamma-Terpinene	12.45
23.787	trans-Sabinene hydrate	3.72
24.824	Terpinolene	2.78
25.786	Linalool	0.99
25.990	cis-Sabinene hydrate	16.50
27.541	cis-p-Menth-2-en-1-ol	1.52
28.776	trans-p-Menth-2-en-1-ol	0.90
29.035	Unidentified	0.02
29.299	Unidentified	0.03
30.899	Borneol	0.04
31.581	Terpinen-4-ol	24.72
31.853	para-Cymen-8-ol	0.06
32.296	Unidentified	0.02
32.479	alpha-Terpineol	3.25
32.602	cis-Piperitol	0.39
32.948	Unidentified	0.02
33.398	trans-Piperitol	0.45
34.362	Unidentified	0.05
34.483	Citronellol	0.11
36.076	Linalyl acetate	2.18
37.840	Unidentified	0.15
39.011	1,4-dihydroxy-p-menth-2-ene	0.09
39.279	4-Terpinenyl acetate	0.07
39.380	Unidentified	0.04
39.733	Unidentified	0.03
40.964	Unidentified	0.14
41.730	delta-Elementene	0.05
43.300	Neryl acetate	0.04
44.574	Geranyl acetate	0.07
47.458	trans-beta-Caryophyllene	2.04
49.684	alpha-Humulene	0.09
51.565	Unidentified	0.04
52.132	Bicyclogermacrene	0.80
52.515	(E,E)-alpha-Farnesene	0.02
56.939	Spathulenol	0.10
57.278	Caryophyllene oxide	0.08
59.601	Unidentified	0.03
60.117	Unidentified	0.07
		100.00

Chromatogram Sweet Marjoram - BIOAROMA



Comments:

The analysis of this Marjoram batch sample meets the expected chemical profile for authentic essential oil of *Origanum majorana*. 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.

Sample Information

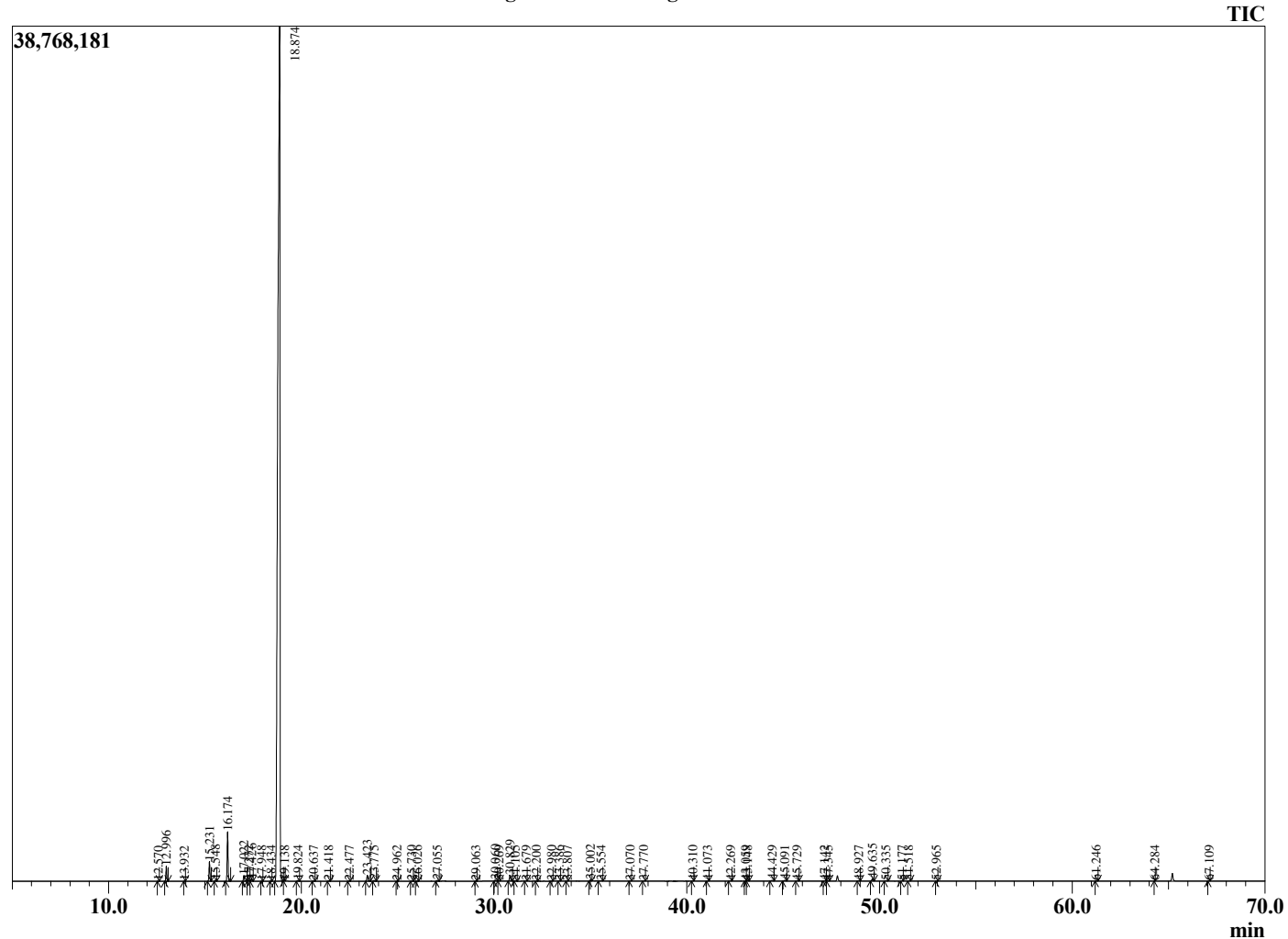
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 11/26/2020 12:07:53 AM
 Sample Type : Essential Oil
 Sample Name : Sweet Orange Oil - Eden's Garden
 Sample ID : BA29IAQ
 Injection Volume : 0.10
 Instrument ID : GC-3



Peak Report TIC

R.Time	Name	Area%
12.570	alpha-Thujene	0.01
12.996	alpha-Pinene	0.67
13.932	Camphene	0.00
15.231	Sabinene	0.92
15.548	beta-Pinene	0.05
16.174	Myrcene	2.39
17.022	Octanal	0.28
17.272	alpha-Phellandrene	0.05
17.426	delta-3-Carene	0.10
17.948	Unidentified	0.00
18.434	Unidentified	0.01
18.874	Limonene	93.87
19.138	(Z)-beta-Ocimene	0.00
19.824	(E)-beta-Ocimene	0.05
20.637	gamma-Terpinene	0.01
21.418	Octanol	0.03
22.477	Terpinolene	0.02
23.423	Linalool	0.32
23.775	Nonanal	0.04
24.962	cis-para-Mentha-2,8-dien-1-ol	0.01
25.730	cis-Limonene oxide	0.01
26.026	trans-Limonene oxide	0.02
27.055	Citronellal	0.05
29.063	Terpinen-4-ol	0.00
30.060	alpha-Terpineol	0.06
30.269	Unidentified	0.00
30.829	Decanal	0.33
31.105	Octyl acetate	0.03
31.679	Unidentified	0.01
32.200	Citronellol	0.01
32.980	Neral	0.03
33.386	Carvone	0.02
33.807	Unidentified	0.01
35.002	Geranial	0.07
35.554	Perillaldehyde	0.03
37.070	Unidentified	0.01
37.770	Undecenal	0.01
40.310	alpha-Terpinyl acetate	0.01
41.073	Neryl acetate	0.01
42.269	alpha-Copaene	0.02
43.059	beta-Cubebene	0.01
43.148	beta-Elementene	0.02
44.429	Dodecanal	0.06
45.091	trans-beta-Caryophyllene	0.06
45.729	beta-Copaene	0.03
47.142	(E)-beta-Farnesene	0.02
47.345	alpha-Humulene	0.01
48.927	Germacrene D	0.02
49.635	Valencene	0.13
50.335	(E,E)-alpha-Farnesene	0.02
51.177	delta-Cadinene	0.03
51.518	beta-Sesquiphellandrene	0.01
52.965	Elemol	0.01
61.246	beta-Sinensal	0.01
64.284	alpha-Sinensal	0.01
67.109	Nootkatone	0.01
		100.00

Chromatogram Sweet Orange Oil-Eden's Garden



Comments:

The analysis of this Sweet Orange batch sample meets the expected chemical profile for authentic essential oil of *Citrus sinensis*. 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.

Sample Information

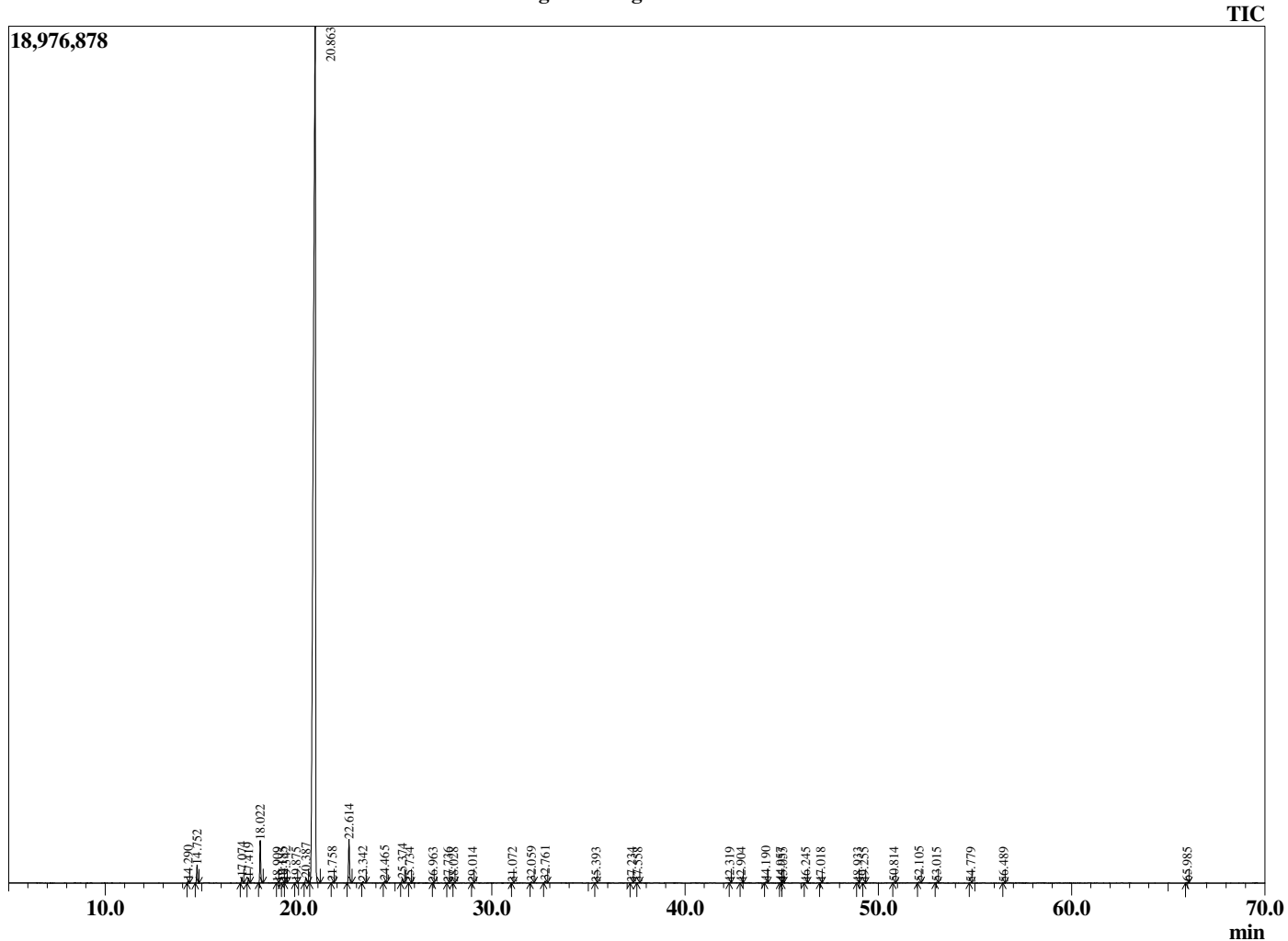
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 3/6/2021 9:02:09 PM
 Sample Type : Essential Oil
 Sample Name : Tangerine -
 Sample ID : BIOAROMA : BB22AAC
 Injection Volume : 0.10
 Instrument ID : GC-2



Peak Report TIC

R.Time	Name	Area%
14.290	alpha-Thujene	0.09
14.752	alpha-Pinene	0.77
17.074	Sabinene	0.27
17.419	beta-Pinene	0.22
18.022	Myrcene	1.94
18.909	Octanal	0.02
19.185	alpha-Phellandrene	0.03
19.342	delta-3-Carene	0.04
19.875	alpha-Terpinene	0.04
20.387	para-Cymene	0.32
20.863	Limonene	92.98
21.758	(E)-beta-Ocimene	0.05
22.614	gamma-Terpinene	2.13
23.342	Octanol	0.07
24.465	Terpinolene	0.10
25.374	Linalool	0.22
25.734	Nonanal	0.01
26.963	trans-para-Mentha-2,8-dien-1-ol	0.00
27.736	cis-Limonene oxide	0.02
28.028	trans-Limonene oxide	0.01
29.014	Citronellal	0.02
31.072	Terpinen-4-ol	0.01
32.059	alpha-Terpineol	0.07
32.761	Decanal	0.10
35.393	Carvone	0.02
37.234	Decanol	0.01
37.558	Perillaldehyde	0.02
42.319	Citronellyl acetate	0.01
42.904	Neryl acetate	0.02
44.190	alpha-Copaene	0.06
44.957	trans-Muurolo-4(14),5-diene	0.03
45.055	beta-Elemene	0.02
46.245	Dodecanal	0.03
47.018	trans-beta-Caryophyllene	0.02
48.933	(E)-beta-Farnesene	0.02
49.255	alpha-Humulene	0.01
50.814	Germacrene D	0.03
52.105	(E,E)-alpha-Farnesene	0.06
53.015	delta-Cadinene	0.04
54.779	alpha-Elemol	0.02
56.489	Unidentified	0.01
65.985	alpha-Sinensal	0.05
		100.00

Chromatogram Tangerine - BIOAROMA



Comments:

The analysis of this Tangerine batch sample meets the expected chemical profile for authentic essential oil of *Citrus reticulata*. 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.

Sample Information

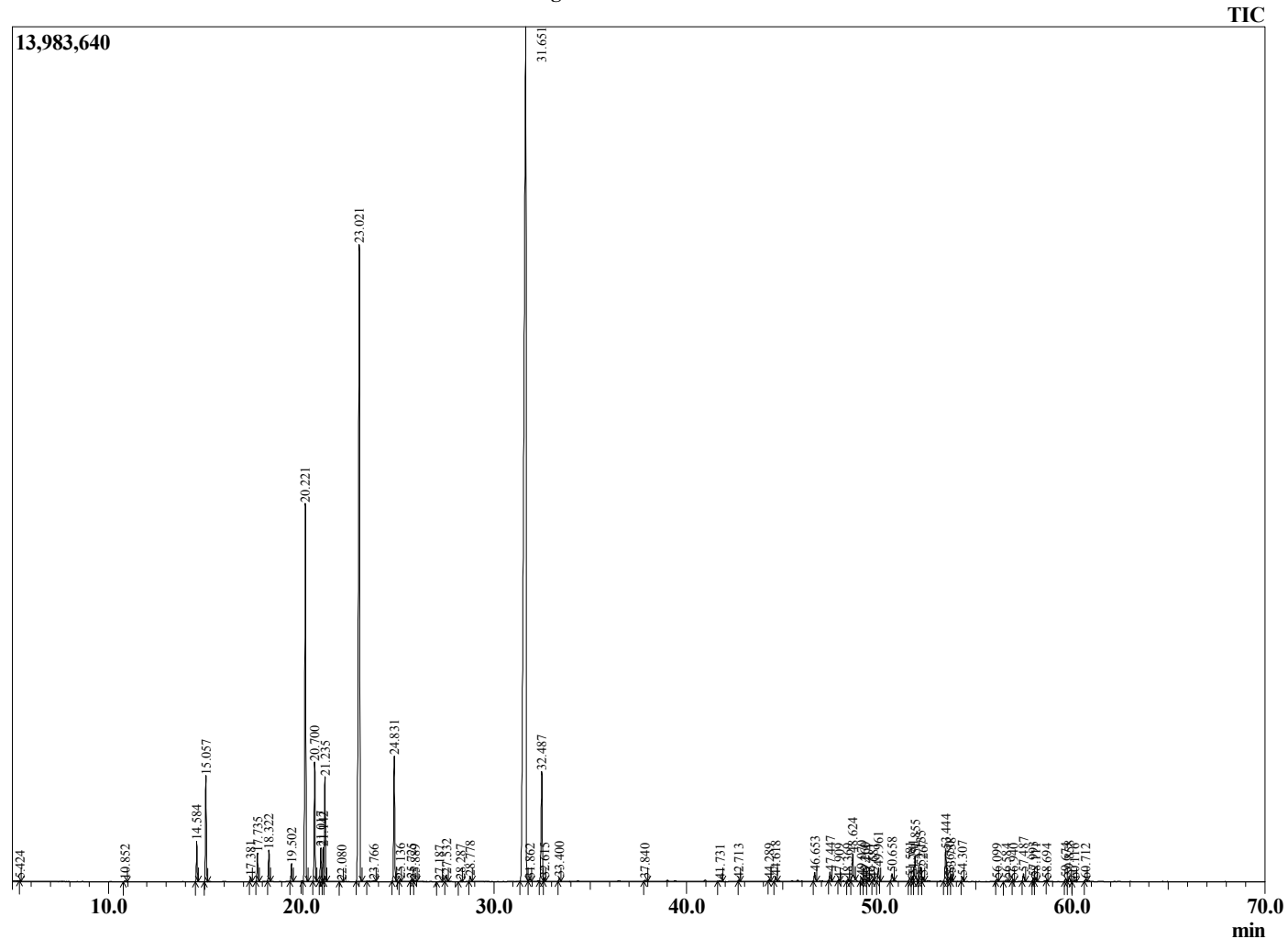
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 7/13/2020 5:19:06 PM
 Sample Type : Essential Oil
 Sample Name : Tea Tree -
 Sample ID : BIOAROMA : BA18FAZ
 Injection Volume : 0.10
 Instrument ID : GC-2



Peak Report TIC

R.Time	Name	Area%
3.876	Ethanol	0.02
5.424	2-Methylbutanal	0.01
10.852	(Z)-3-Hexenol	0.02
14.584	alpha-Thujene	0.83
15.057	alpha-Pinene	2.25
17.381	Sabinene	0.09
17.735	beta-Pinene	0.63
18.322	Myrcene	0.71
19.502	alpha-Phellandrene	0.42
20.221	alpha-Terpinene	9.39
20.700	para-Cymene	2.81
21.017	Limonene	0.80
21.142	beta-Phellandrene	0.81
21.235	1,8-Cineole	2.44
22.080	(E)-beta-Ocimene	0.01
23.021	gamma-Terpinene	19.93
23.766	trans-Sabinene hydrate	0.03
24.831	Terpinolene	3.12
25.136	para-Cymenene	0.05
25.725	Linalool	0.05
25.889	cis-Sabinene hydrate	0.03
27.187	alpha-Fenchol	0.01
27.532	cis-p-Menth-2-en-1-ol	0.17
28.287	Unidentified	0.03
28.778	trans-p-Menth-2-en-1-ol	0.13
31.651	Terpinen-4-ol	45.51
31.862	para-Cymen-8-ol	0.06
32.487	alpha-Terpineol	3.02
32.615	cis-Piperitol	0.05
33.400	trans-Piperitol	0.10
37.840	1,4-dihydroxy-p-menth-2-ene	0.04
41.731	delta-Elementene	0.03
42.713	alpha-Cubebene	0.03
44.289	Isoledene	0.04
44.618	alpha-Copaene	0.12
46.653	alpha-Gurjunene	0.25
47.447	trans-beta-Caryophyllene	0.25
47.909	Unidentified	0.04
48.369	beta-Gurjunene	0.05
48.624	Aromadendrene	0.87
49.070	alpha-Guaiene	0.12
49.260	trans-Muurolo-4(14),5-diene	0.07
49.414	Unidentified	0.03
49.681	alpha-Humulene	0.04
49.961	Alloaromadendrene	0.40
50.658	cis-Muurolo-4(14),5-diene	0.25
51.581	delta-Selinene	0.10
51.741	beta-Selinene	0.14
51.855	Viridiflorene	0.81
52.135	Bicyclogermacrene	0.44
52.267	alpha-Muuroloene	0.11
53.444	delta-Cadinene	0.88
53.650	trans-Calamenene	0.10
53.738	Zonarene	0.20
54.307	trans-Cadina-1,4-diene	0.14
56.099	Epiglobulol	0.05
56.584	Palustrol	0.07
56.940	Spathulenol	0.05
57.487	Globulol	0.21
57.993	Viridiflorol	0.11
58.111	Guaiol	0.08
58.694	Rosifolol	0.02

Chromatogram Tea Tree - BIOAROMA



Comments:

The analysis of this Tea Tree batch sample meets the expected chemical profile for authentic essential oil of *Melaleuca alternifolia*. 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.

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R.Time	Name	Area%
59.674	Eudesm-5-en-11-ol	0.08
59.858	1-epi-Cubenol	0.12
60.116	Unidentified	0.05
60.712	Unidentified	0.05
		100.00

Sample Information

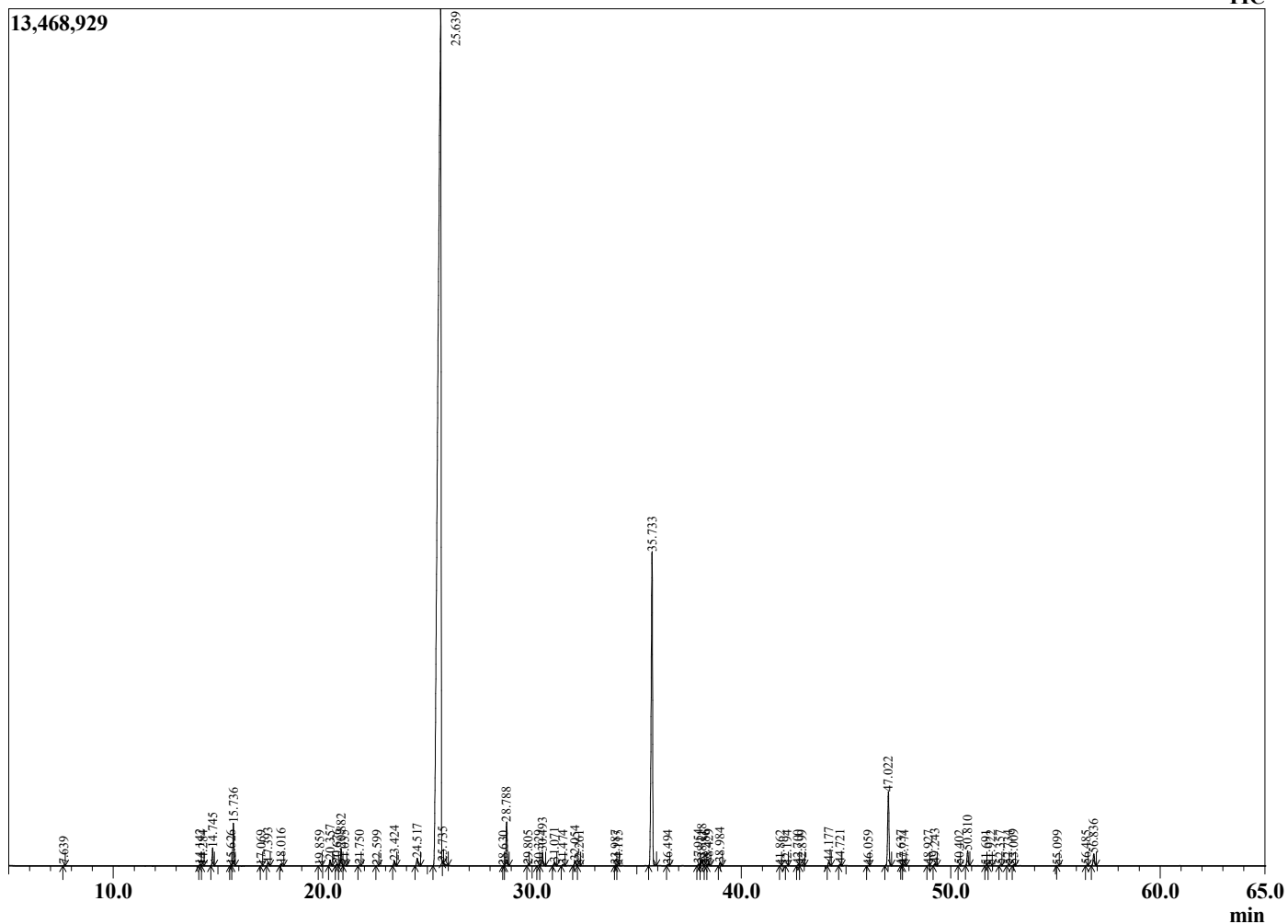
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 3/7/2021 11:51:29 AM
 Sample Type : Essential Oil
 Sample Name : Thyme ct. Linalool -
 Sample ID : BIOAROMA : BB22AAD
 Injection Volume : 0.10
 Instrument ID : GC-3



Peak Report TIC

R.Time	Name	Area%
7.639	Methyl 2-methylbutyrate	0.02
14.142	Tricyclene	0.04
14.284	alpha-Thujene	0.01
14.745	alpha-Pinene	0.47
15.626	alpha-Fenchene	0.03
15.736	Camphene	1.19
17.069	Sabinene	0.01
17.393	1-Octen-3-ol	0.12
18.016	Myrcene	0.07
19.859	alpha-Terpinene	0.02
20.357	para-Cymene	0.18
20.676	Limonene	0.05
20.882	1,8-Cineole	0.54
21.035	cis-beta-Ocimene	0.02
21.750	trans-beta-Ocimene	0.02
22.599	gamma-Terpinene	0.01
23.424	cis-Linalool oxide (furanoid)	0.17
24.517	trans-Linalool oxide (furanoid)	0.28
25.639	Linalool	77.11
25.735	Hotrienol	0.01
28.630	Unidentified	0.00
28.788	Camphor	1.46
29.805	Lavandulol	0.01
30.329	delta-Terpineol	0.01
30.493	Borneol	0.46
31.071	Terpinen-4-ol	0.12
31.474	Hex-(3Z)-enyl butyrate	0.04
32.054	alpha-Terpineol	0.17
32.261	Unidentified	0.01
33.987	Nerol	0.01
34.115	Citronellol	0.01
35.733	Linalyl acetate	12.48
36.494	Unidentified	0.03
37.954	Lavandulyl acetate	0.05
38.118	Bornyl acetate	0.25
38.286	Isobornyl acetate	0.01
38.429	Thymol	0.06
38.984	Carvacrol	0.11
41.862	Myrcen-8-yl acetate	0.01
42.194	alpha-Terpinyl acetate	0.01
42.700	Unidentified	0.03
42.899	Neryl acetate	0.03
44.177	Geranyl acetate	0.13
44.721	beta-Bourbonene	0.06
46.059	cis-beta-Caryophyllene	0.01
47.022	beta-Caryophyllene	2.82
47.637	beta-Copaene	0.00
47.774	trans-alpha-Bergamotene	0.04
48.927	trans-beta-Farnesene	0.02
49.243	alpha-Humulene	0.08
50.402	trans-Cadina-1(6),4-diene	0.01
50.810	Germacrene D	0.55
51.691	Bicyclogermacrene	0.01
51.922	Lavandulyl isovalerate	0.01
52.357	beta-Bisabolene	0.01
52.734	gamma-Cadinene	0.01
53.009	delta-Cadinene	0.04
55.099	Geranyl butyrate	0.01
56.485	Germacren D-4-ol	0.02
56.836	Caryophyllene oxide	0.46
		100.00

Chromatogram Thyme ct. Linalool



Comments:

The analysis of this Thyme ct. Linalool batch sample meets the expected chemical profile for authentic essential oil of *Thymus vulgaris*. 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.

Sample Information

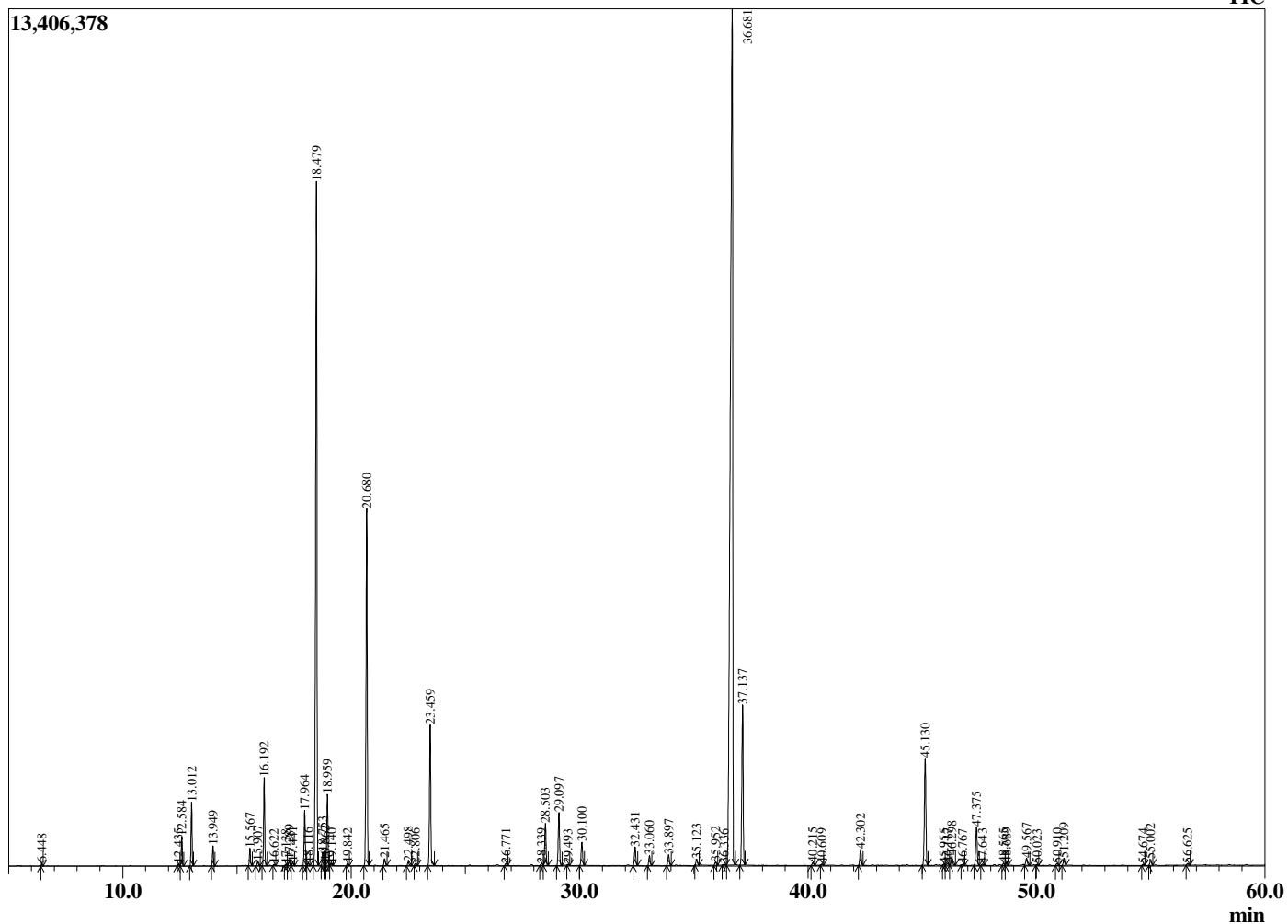
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 9/1/2020 2:41:17 AM
 Sample Type : Essential Oil
 Sample Name : Thyme, Red -
 Sample ID : BIOAROMA : BA08GX
 Injection Volume : 0.10
 Instrument ID : GC-3



Peak Report TIC

R.Time	Name	Area%
4.244	3-Methylbutanal	0.03
4.356	2-Methylbutanal	0.02
6.448	Methyl 2-methylbutyrate	0.05
12.435	Tricyclene	0.05
12.584	alpha-Thujene	0.61
13.012	alpha-Pinene	1.36
13.949	Camphene	0.43
15.567	1-Octen-3-ol	0.40
15.907	3-Octanone	0.12
16.192	Myrcene	2.04
16.622	3-Octanol	0.03
17.138	Pseudolimonene	0.03
17.289	alpha-Phellandrene	0.15
17.441	delta-3-Carene	0.09
17.964	alpha-Terpinene	1.35
18.116	ortho-Cymene	0.07
18.479	para-Cymene	18.55
18.753	Limonene	0.31
18.862	beta-Phellandrene	0.10
18.959	1,8-cineole	1.71
19.140	cis-beta-Ocimene	0.04
19.842	trans-beta-Ocimene	0.07
20.680	gamma-Terpinene	9.41
21.465	trans-Sabinene hydrate	0.19
22.498	Terpinolene	0.12
22.806	para-Cymenene	0.05
23.459	Linalool	3.73
26.771	Camphor	0.06
28.339	Thuj-3-en-2-one (Umbellulone)	0.07
28.503	Borneol	1.19
29.097	Terpinen-4-ol	1.54
29.493	para-Cymen-8-ol	0.03
30.100	alpha-Terpineol	0.69
32.431	Thymol methyl ether	0.52
33.060	Carvacrol methyl ether	0.27
33.897	Geraniol	0.32
35.123	Geranial	0.20
35.952	Isothymol	0.10
36.336	Bornyl acetate	0.04
36.681	Thymol	42.75
37.137	Carvacrol	4.54
40.215	Thymol acetate	0.08
40.609	Eugenol	0.03
42.302	alpha-Copaene	0.50
45.130	beta-Caryophyllene	3.34
45.955	trans-alpha-Bergamotene	0.04
46.117	Unidentified	0.08
46.298	Aromadendrene	0.30
46.767	alpha-Guaiene	0.03
47.375	alpha-Humulene	1.18
47.643	Alloaromadendrene	0.04
48.565	trans-Cadina-1(6),4-diene	0.07
48.689	Unidentified	0.07
49.567	Viridiflorene (Ledene)	0.23
50.023	alpha-Murolene	0.02
50.910	gamma-Cadinene	0.06
51.209	delta-Cadinene	0.22
54.674	Spathulenol	0.04
55.002	Caryophyllene oxide	0.18
56.625	Humulene epoxide II	0.06
		100.00

Chromatogram Thyme, Red - BIOAROMA



Comments:

The analysis of this Thyme, Red batch sample meets the expected chemical profile for authentic essential oil of *Thymus vulgaris*. 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.

Sample Information

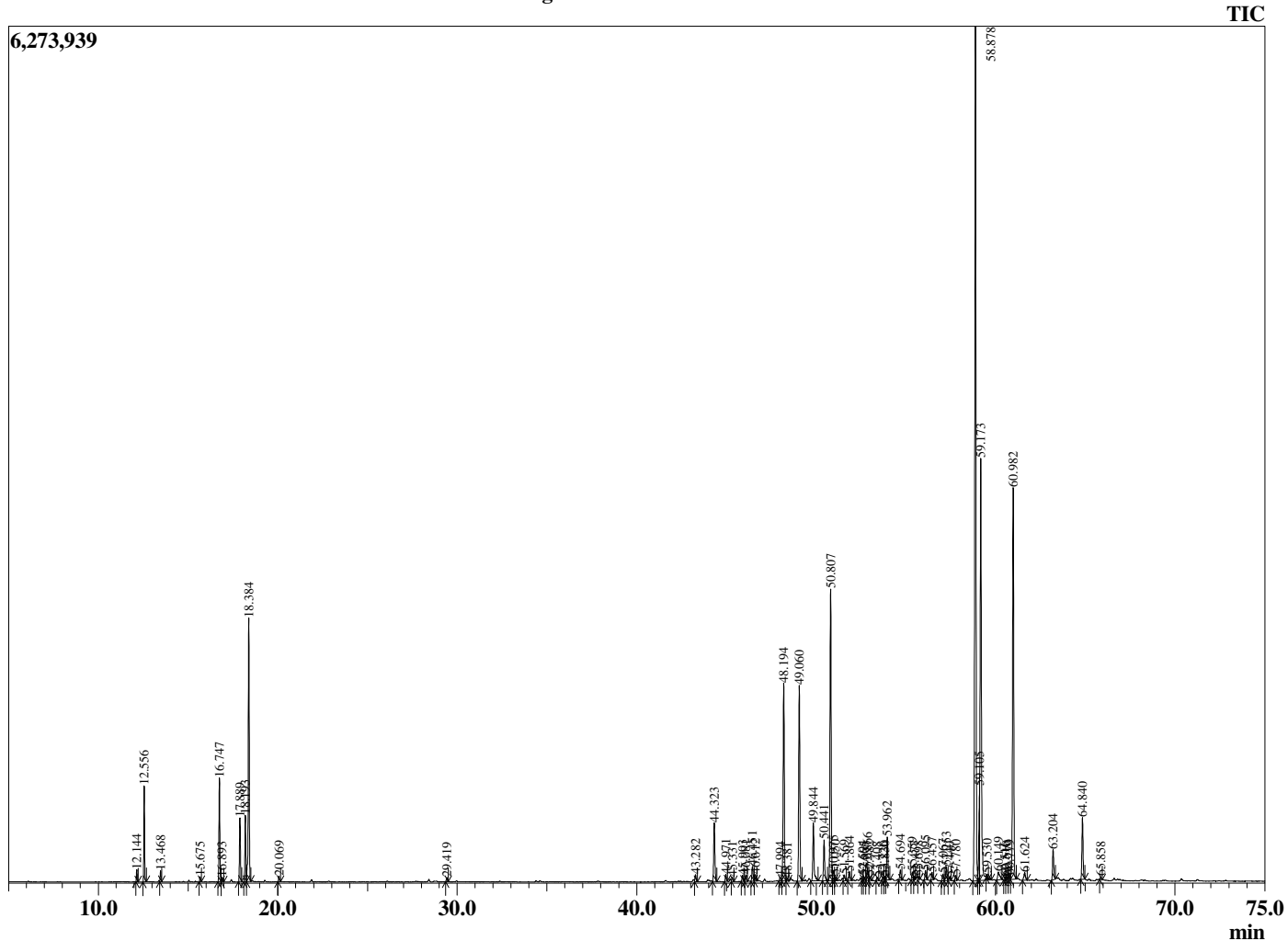
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 7/11/2020 1:09:26 AM
 Sample Type : Essential Oil
 Sample Name : Turmeric -
 Sample ID : BIOAROMA : BA18FBA
 Injection Volume : 0.10
 Instrument ID : GC-4



Peak Report TIC

R.Time	Name	Area%
12.144	alpha-Thujene	0.23
12.556	alpha-Pinene	1.80
13.468	Camphene	0.21
15.675	Myrcene	0.10
16.747	alpha-Phellandrene	2.21
16.893	delta-3-Carene	0.10
17.889	para-Cymene	1.42
18.193	Limonene	1.46
18.384	1,8-cineole	6.24
20.069	gamma-Terpinene	0.13
29.419	alpha-Terpineol	0.10
43.282	7-epi-Sesquithujene	0.19
44.323	alpha-Santalene	1.70
44.971	gamma-Elemene	0.19
45.331	Unidentified	0.12
45.903	Unidentified	0.17
46.081	epi-beta-Santalene	0.19
46.451	trans-beta-Farnesene	0.45
46.612	alpha-Humulene	0.21
47.994	Italicene	0.10
48.194	Ar-Curcumene	5.51
48.381	Unidentified	0.08
49.060	alpha-Zingiberene	5.53
49.844	beta-Bisabolene	1.77
50.441	alpha-Teresantalic acid	1.17
50.807	beta-Sesquiphellandrene	8.15
50.975	trans-gamma-Bisabolene	0.31
51.050	Unidentified	0.11
51.569	Eremophilene isomer	0.18
51.864	Selina-3,7(11)-diene	0.27
52.594	Unidentified	0.14
52.665	Unidentified	0.10
52.866	Germacrene B	0.38
52.982	Unidentified	0.12
53.408	Unidentified	0.09
53.726	Unidentified	0.09
53.830	Unidentified	0.10
53.962	Unidentified	1.31
54.694	Unidentified	0.31
55.359	Unidentified	0.22
55.477	Unidentified	0.09
55.698	Spathulenol	0.07
56.095	Unidentified	0.27
56.457	anti-syn-syn-Helifolen-12-al C	0.20
57.067	Unidentified	0.22
57.253	Unidentified	0.46
57.440	Unidentified	0.11
57.780	Unidentified	0.16
58.878	Ar-turmerone	25.24
59.105	allo-Himachalol	1.51
59.173	Turmerone	13.23
59.530	Unidentified	0.11
60.149	Unidentified	0.39
60.516	Unidentified	0.08
60.610	Unidentified	0.10
60.779	Unidentified	0.12
60.982	Curhone	11.41
61.624	Curcuphenol	0.28
63.204	Unidentified	0.89
64.840	(E)-alpha-Atlantone	1.74
65.858	Unidentified	0.07
		100.00

Chromatogram Turmeric - BIOAROMA



Comments:

The analysis of this Turmeric batch sample meets the expected chemical profile for authentic essential oil of *Curcuma longa*. 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.