

Sample Information

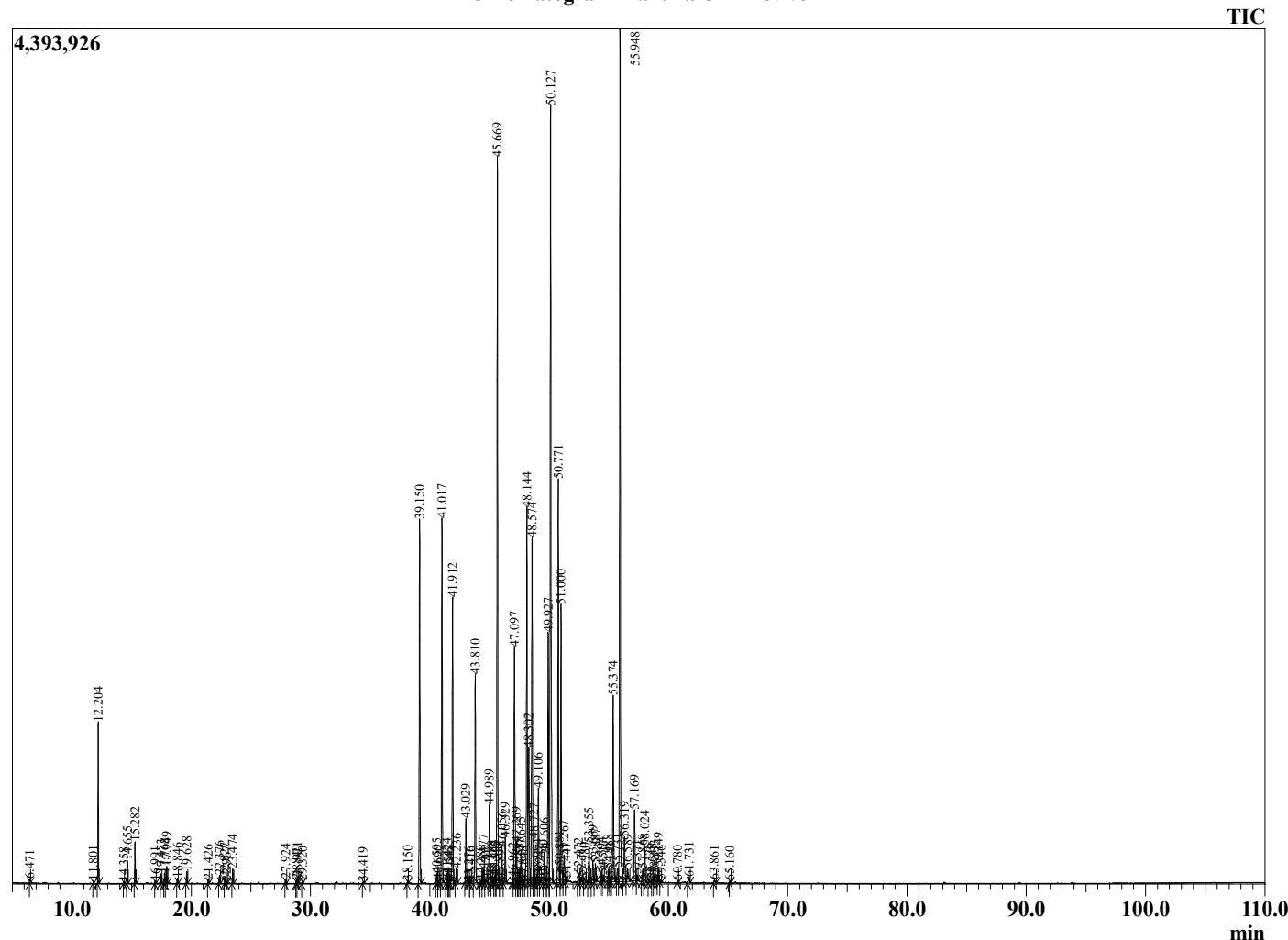
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 7/11/2023 10:45:21 PM
 Sample Type : Essential Oil
 Sample Name : Manuka Oil - Revive
 Sample ID : 4E
 Injection Volume : 0.10
 Instrument ID : GC-4



Peak Report TIC

R.Time	Name	Area%
6.471	Isopropyl ketone	0.03
11.801	alpha-Thujene	0.03
12.204	alpha-Pinene	1.41
14.358	4(10)-Thujene	0.02
14.655	beta-Pinene	0.22
15.282	Myrcene	0.41
16.991	alpha-Terpinene	0.02
17.473	para-Cymene	0.10
17.768	Limonene	0.11
17.949	Eucayptol	0.19
18.846	trans-beta-Ocimene	0.06
19.628	gamma-Terpinene	0.13
21.426	Terpinolene	0.04
22.376	Linalool	0.09
22.827	Solusterol	0.06
22.967	2-methylbutyl-Isovalerate	0.02
23.474	3-Methyl-3-butenyl-3-methylbutyrate	0.16
27.924	Terpinen-4-ol	0.05
28.840	Isoamyl Tiglate	0.04
28.921	alpha-Terpineol	0.08
29.320	3-Methylbut-3-enyl (E)-2-methylbut-2-enoate	0.02
34.419	trans-2-Octenyl Acetate	0.02
38.150	delta-Elementene	0.03
39.150	alpha-Cubebene	4.76
40.595	Ylangene	0.15
40.690	Unidentified	0.03
41.017	alpha-Copaene	4.85
41.424	Elementene Isomer	0.13
41.542	Unidentified	0.05
41.645	Unidentified	0.02
41.912	beta-Elementene	3.80
42.236	Benzyl isovalerate	0.19
43.029	alpha-Gurjunene	0.86
43.276	trans-Cadina-1(6),4-diene	0.02
43.416	alpha-Gurjunene	0.03
43.810	beta-Caryophyllene	2.77
44.280	gamma-Maaliene	0.04
44.477	Calarene	0.22
44.702	Selina-3,7(11)-diene	0.06
44.989	beta-Copaene	1.08
45.188	6,9-Guaiadiene	0.10
45.443	Unidentified	0.11
45.515	Unidentified	0.05
45.669	Cadina-3,5-diene	9.41
45.899	Unidentified	0.05
46.056	alpha-Humulene	0.49
46.329	9-epi-trans-Caryophyllene	0.64
46.962	Unidentified	0.06
47.097	Cadina-1(6),4-diene	3.88
47.269	gamma-Cadinene	0.56
47.389	Unidentified	0.06
47.538	alpha-Amorphene	0.14
47.645	beta-Copaene	0.44
47.848	Unidentified	0.04
48.144	beta-Selinene	5.35
48.302	cis-Muurolo-4(14),5-diene	2.36
48.574	alpha-Selinene	5.11
48.727	alpha-Muuroloene	0.63
48.994	trans-Cadina-1(6),4-diene	0.15
49.106	alpha-Farnesene	1.27
49.247	Unidentified	0.04
49.606	gamma-Cadinene	0.43

Chromatogram Manuka Oil - Revive



Comments:

The analysis of this Manuka batch sample meets the expected chemical profile for authentic essential oil of *Leptospermum scoparium*. 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%
49.724	4-epi-cubedol	0.06
49.927	delta-Cadinene	3.57
50.127	trans-Calamenene	12.41
50.771	trans-Cadina-1,4-diene	5.53
50.881	Unidentified	0.02
51.000	Flavesone	3.40
51.267	alpha-Calacorene	0.40
51.447	Unidentified	0.06
52.472	Unidentified	0.18
52.713	Unidentified	0.06
52.980	Palustrol	0.09
53.355	Spathulenol	0.57
53.669	Caryophyllene oxide	0.33
53.887	Globulol	0.27
54.394	Viridiflorol	0.15
54.517	Cubeban-11-ol	0.12
54.988	Ledol	0.17
55.141	Unidentified	0.07
55.374	Isoleptospermone	2.53
55.731	Intermedeol	0.24
55.948	Leptospermone	12.11
56.319	Epicubenol	0.79
56.589	Unidentified	0.26
57.169	Epicubenol analog	1.28
57.371	alpha-Muurolol	0.09
57.868	Maaliol	0.25
58.024	Intermedeol	0.53
58.376	Unidentified	0.05
58.648	Unidentified	0.06
58.833	Cadalene	0.11
59.149	beta-Copaen-4-alfa-ol	0.19
59.346	Unidentified	0.02
60.780	Unidentified	0.02
61.731	Unidentified	0.12
63.861	Unidentified	0.06
65.160	Unidentified	0.02
		100.00