

Sample Information

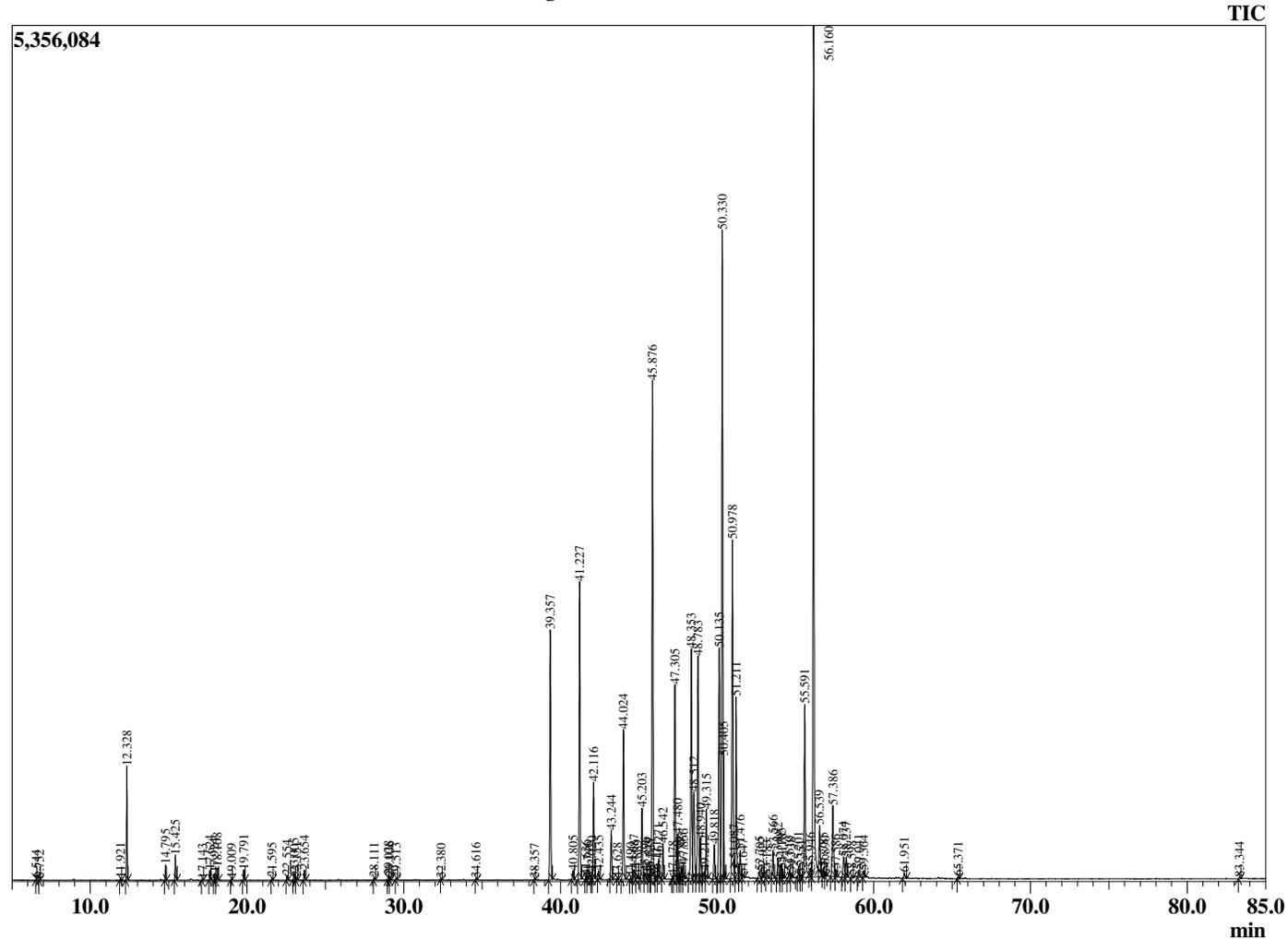
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 3/6/2021 1:58:51 PM
 Sample Type : Essential Oil
 Sample Name : Manuka - Edens Garden
 Sample ID : BB22AQ
 Injection Volume : 0.10
 Instrument ID : GC-4



Peak Report TIC

R.Time	Name	Area%
6.544	Acetylbutyryl	0.01
6.752	Octane	0.01
11.921	alpha-Thujene	0.03
12.328	alpha-Pinene	1.29
14.795	beta-Pinene	0.19
15.425	Myrcene	0.32
17.143	alpha-Terpinene	0.02
17.624	para-Cymene	0.13
17.924	Limonene	0.09
18.108	1,8-cineole	0.18
19.009	(E)-beta-Ocimene	0.02
19.791	gamma-Terpinene	0.14
21.595	Terpinolene	0.04
22.554	Linalool	0.07
23.005	Isoamyl isovalerate	0.10
23.151	2-Methylbutyl isovalerate	0.04
23.654	3-Methylbut-3-enyl 3-methylbutyrate	0.15
28.111	Terpinen-4-ol	0.04
29.028	Isoamyl tiglate	0.06
29.106	alpha-Terpineol	0.05
29.513	Unidentified	0.03
32.380	Unidentified	0.02
34.616	Unidentified	0.02
38.357	delta-Elementene	0.02
39.357	alpha-Cubebene	4.10
40.805	alpha-Ylangene	0.17
41.227	alpha-Copaene	5.03
41.636	Elementene isomer	0.06
41.746	beta-Bourbonene	0.04
42.020	beta-Cubebene	0.09
42.116	beta-Elementene	1.64
42.435	Benzyl isovalerate	0.15
43.244	alpha-Gurjunene	0.83
43.628	Unidentified	0.02
44.024	trans-beta-Caryophyllene	2.57
44.490	Unidentified	0.04
44.687	beta-Gurjunene (calarene)	0.21
44.889	trans-alpha-Bergamotene	0.07
45.203	Aromadendrene	1.25
45.396	6,9-Guanidiene	0.13
45.649	Unidentified	0.11
45.725	Dihydro-alpha-Curcumene	0.05
45.876	trans-Murrola-3,5-diene	8.26
46.111	Unidentified	0.04
46.271	alpha-Humulene	0.33
46.542	Alloaromadendrene	0.60
47.178	Unidentified	0.04
47.305	10-beta-H-Cadina-1(6),4-diene	3.86
47.480	trans-Cadina-1(6),4-diene	0.79
47.599	Unidentified	0.11
47.743	alpha-Amorphene	0.19
47.856	Germacrene D	0.25
48.353	beta-Selinene	4.29
48.512	trans-Muurolo-4(14),5-diene	2.04
48.783	alpha-Selinene	4.22
48.940	alpha-Muuroloene	0.74
49.212	delta-Amorphene	0.19
49.315	(E,E)-alpha-Farnesene	1.13
49.818	gamma-Cadinene	0.59
50.135	delta-Cadinene	4.42
50.330	trans-Calamenene	11.95
50.405	Zonarene	1.14

Chromatogram Manuka - Edens Garden



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%
50.978	trans-Cadina-1,4-diene	6.13
51.087	Unidentified	0.03
51.211	Flavesone	3.00
51.476	alpha-Calacorene	0.54
51.647	Unidentified	0.07
52.705	Unidentified	0.17
52.922	Isoshyobunone	0.09
53.183	Palustrol	0.07
53.566	Spathulenol	0.50
53.882	Caryophyllene oxide	0.39
54.105	Viridiflorol	0.26
54.178	Unidentified	0.17
54.610	Viridiflorol	0.15
54.738	Guaiol	0.10
55.201	Ledol	0.19
55.351	Unidentified	0.04
55.591	Isoleptospermone	3.31
55.946	Unidentified	0.10
56.160	Leptospermone	15.74
56.539	1-epi-Cubenol	0.80
56.785	Unidentified	0.14
56.890	Unidentified	0.06
57.386	Unidentified	1.61
57.586	delta-Cadinol	0.14
58.074	alpha-Eudesmol	0.53
58.237	Unidentified	0.38
58.598	Unidentified	0.04
59.041	Cadalene	0.14
59.364	Unidentified	0.11
61.951	Unidentified	0.12
65.371	Unidentified	0.03
83.344	Grandiflorone	0.03
		100.00