

Sample Information

Analyzed by : Dr. Robert S. Pappas
 Analyzed : 3/4/2019 11:24:08 PM
 Sample Type : Essential Oil
 Sample Name : Turmeric - Barefut
 Sample ID : 0109
 Injection Volume : 0.10
 Instrument ID : GC-4

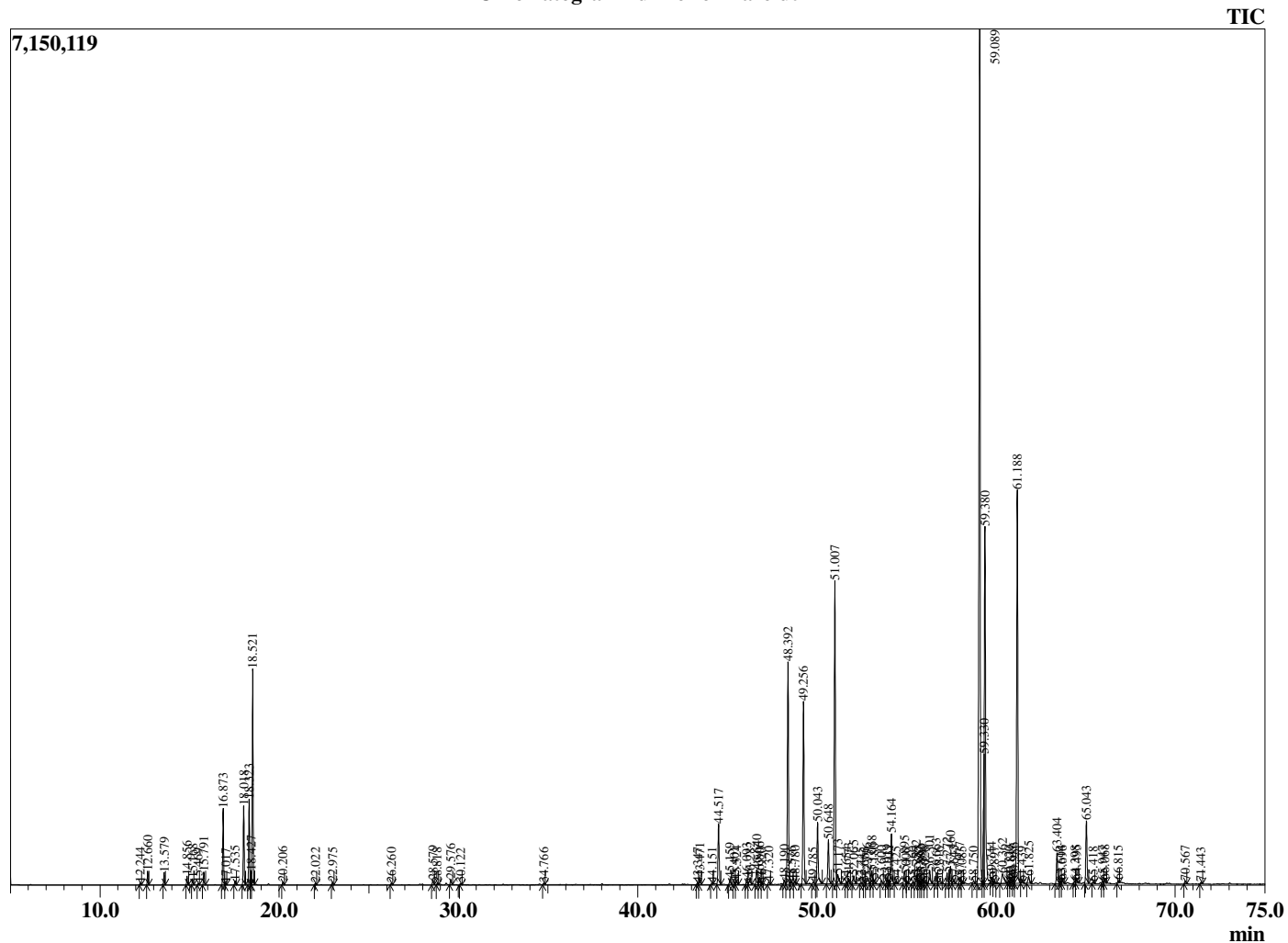


Peak Report TIC

R.Time	Name	Area%
12.244	alpha-Thujene	0.04
12.660	alpha-Pinene	0.26
13.579	Camphene	0.23
14.856	Sabinene	0.17
15.168	beta-Pinene	0.12
15.469	6-Methyl hept-5-en-2-one	0.03
15.791	Myrcene	0.26
16.873	alpha-Phellandrene	1.59
17.017	delta-3-Carene	0.03
17.535	alpha-Terpinene	0.08
18.018	para-Cymene	1.70
18.323	Limonene	1.82
18.427	beta-Phellandrene	0.26
18.521	1,8-cineole	4.59
20.206	gamma-Terpinene	0.06
22.022	Terpinolene	0.04
22.975	Linalool	0.05
26.260	Camphor	0.04
28.579	Terpinen-4-ol	0.11
28.818	4'-Methylacetophenone	0.04
29.576	alpha-Terpineol	0.14
30.122	alpha-Phellandrene epoxide	0.03
34.766	Unidentified	0.03
43.347	Unidentified	0.05
43.471	Sesquithujene isomer	0.19
44.151	cis-alpha-Bergamotene	0.06
44.517	alpha-Santalene	1.70
45.159	gamma-Elementene	0.15
45.401	trans-alpha-Bergamotene	0.07
45.524	Unidentified	0.11
46.093	Unidentified	0.17
46.282	epi-beta-Santalene	0.25
46.640	trans-beta-Farnesene	0.43
46.806	alpha-Humulene	0.24
46.920	Unidentified	0.05
47.320	alpha-Acoradiene	0.07
48.190	Unidentified	0.11
48.392	Ar-Curcumene	6.08
48.576	Farnesene isomer	0.08
48.780	Unidentified	0.10
49.256	alpha-Zingiberene	4.98
49.785	Unidentified	0.07
50.043	beta-Bisabolene	1.80
50.648	alpha-Teresantalic acid	1.26
51.007	beta-Sesquiphellandrene	8.24
51.173	trans-gamma-Bisabolene	0.38
51.654	Unidentified	0.06
51.773	Eremophilene isomer	0.16
52.065	Selina-3,7(11)-diene	0.27
52.445	Unidentified	0.04
52.666	Unidentified	0.04
52.796	Unidentified	0.28
53.068	Germacrene B	0.36
53.180	Unidentified	0.11
53.600	Unidentified	0.10
53.919	Unidentified	0.12
54.031	Unidentified	0.11
54.164	Unidentified	1.46
54.425	Caryophyllene oxide	0.07
54.895	Unidentified	0.42
55.000	Unidentified	0.03
55.360	Unidentified	0.07

This report is valid for 1 year from the analyzed date.

Chromatogram Turmeric - Barefut



Comments:

The analysis of this Turmeric Oil batch sample meets the expected chemical profile for authentic essential oil of *Curcuma longa*. No contamination or adulteration was detected.

R.Time	Name	Area%
55.552	Unidentified	0.27
55.683	Unidentified	0.13
55.802	Unidentified	0.11
55.899	Unidentified	0.15
56.026	Unidentified	0.07
56.301	Zingiberenol	0.43
56.663	anti-syn-syn-Helifolen-12-al C	0.31
56.816	Unidentified	0.12
57.272	Unidentified	0.35
57.460	Unidentified	0.54
57.643	Unidentified	0.11
57.977	Unidentified	0.21
58.085	Unidentified	0.05
58.750	Unidentified	0.08
59.089	Ar-Tumerone	25.50
59.330	allo-Himachalol	2.14
59.380	Tumerone	11.51
59.744	Unidentified	0.12
59.897	Unidentified	0.04
60.362	Unidentified	0.51
60.720	Germacrone	0.06
60.816	Unidentified	0.11
60.986	Unidentified	0.06
61.188	Curlone	11.15
61.439	Unidentified	0.05
61.825	Curcuphenol	0.24
63.404	Unidentified	0.91
63.614	Unidentified	0.08
63.696	Unidentified	0.10
64.398	Unidentified	0.07
64.495	Unidentified	0.12
65.043	(E)-alpha-Atlantone	1.82
65.418	Unidentified	0.04
65.947	Unidentified	0.08
66.068	Unidentified	0.10
66.815	Unidentified	0.07
70.567	Unidentified	0.08
71.443	Unidentified	0.04
		100.00