

Sample Information

Analyzed by : Dr. Robert S. Pappas
 Analyzed : 3/29/2019 5:33:47 AM
 Sample Type : Essential Oil
 Sample Name : Marjoram - Barefut
 Sample ID : 0105
 Injection Volume : 0.10
 Instrument ID : GC-3

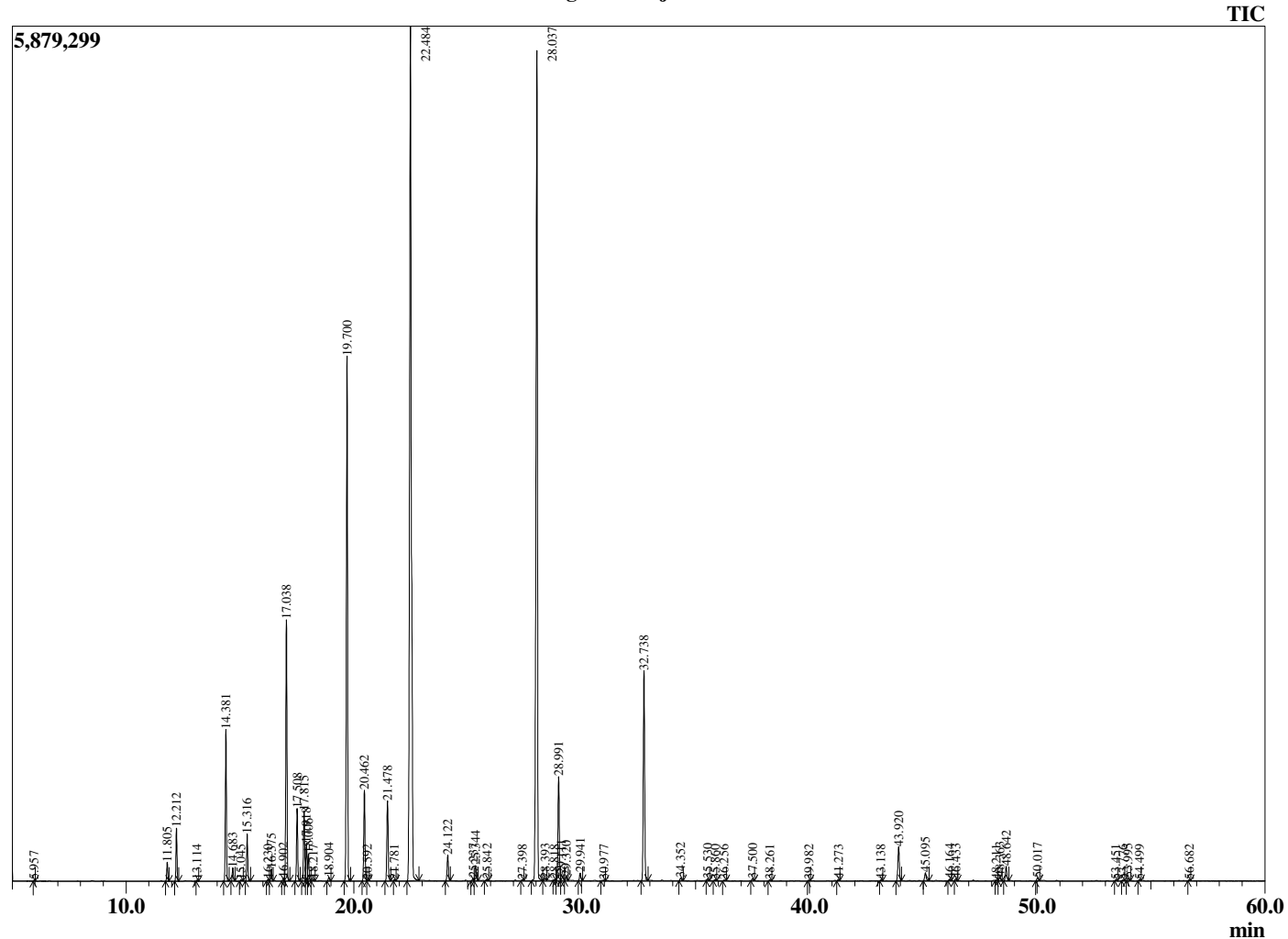


Peak Report TIC

R.Time	Name	Area%
5.957	Methyl 2-methylbutyrate	0.02
11.805	alpha-Thujene	0.36
12.212	alpha-Pinene	1.07
13.114	Camphene	0.02
14.381	Sabinene	3.18
14.683	beta-Pinene	0.29
15.045	3-Octanone	0.03
15.316	Myrcene	1.00
16.230	Pseudolimonene	0.04
16.375	alpha-Phellandrene	0.26
16.902	1,4-Cineole	0.07
17.038	alpha-Terpinene	6.02
17.508	para-Cymene	1.66
17.815	Limonene	1.62
17.918	beta-Phellandrene	0.87
18.006	1,8-Cineole	0.61
18.217	cis-beta-Ocimene	0.04
18.904	trans-beta-Ocimene	0.09
19.700	gamma-Terpinene	12.28
20.462	trans-Sabinene hydrate	2.18
20.592	Pinol	0.03
21.478	Terpinolene	2.05
21.781	para-Cymene	0.03
22.484	Linalool	29.63
24.122	cis-para-Menth-2-en-1-ol	0.66
25.237	trans-Pinocarveol	0.07
25.344	trans-para-Menth-2-en-1-ol	0.40
25.842	Unidentified	0.04
27.398	Borneol	0.02
28.037	Terpinen-4-ol	23.99
28.393	para-Cymen-8-ol	0.06
28.818	Unidentified	0.02
28.991	alpha-Terpineol	2.71
29.111	cis-Piperitol	0.21
29.320	gamma-Terpineol	0.11
29.941	trans-Piperitol	0.20
30.977	Nerol	0.03
32.738	Linalyl acetate	5.57
34.352	cis-Ascrinol glycol	0.08
35.530	Unidentified	0.05
35.860	Unidentified	0.03
36.256	Unidentified	0.02
37.500	Unidentified	0.06
38.261	delta-Elementene	0.03
39.982	Neryl acetate	0.02
41.273	Geranyl acetate	0.03
43.138	alpha-Gurjunene	0.03
43.920	beta-Caryophyllene	1.00
45.095	Aromadendrene	0.25
46.164	alpha-Humulene	0.05
46.433	Alloaromadendrene	0.06
48.211	beta-Selinene	0.02
48.363	Viridiflorene	0.10
48.642	Bicyclogermacrene	0.43
50.017	delta-Cadinene	0.09
53.451	Spathulenol	0.02
53.776	Unidentified	0.02
53.995	Globulol	0.06
54.499	Viridiflorol	0.03
56.682	Unidentified	0.02
		100.00

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

Chromatogram Marjoram - Barefut



Comments:

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