

Sample Information

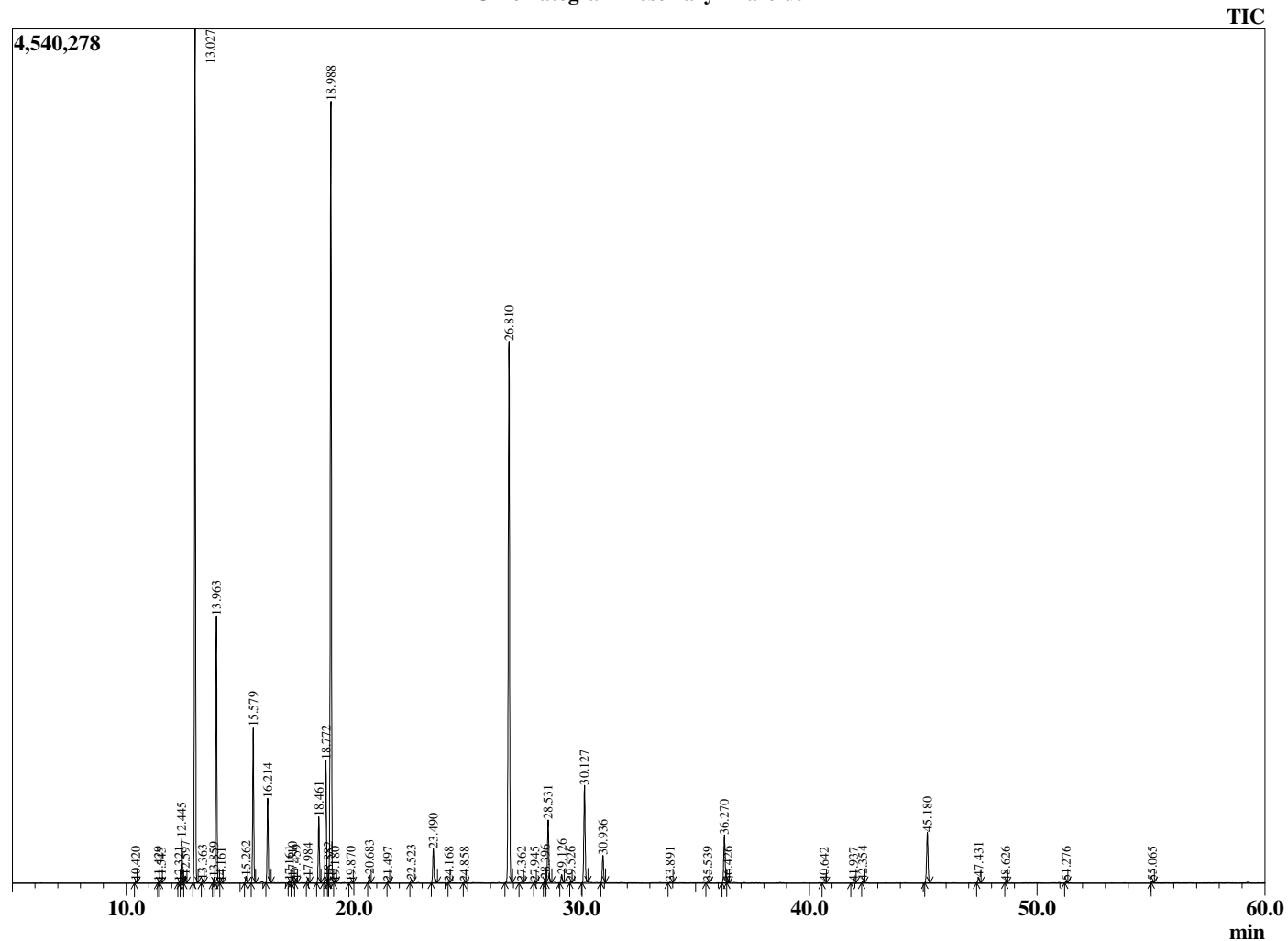
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 12/12/2019 1:18:52 AM
 Sample Type : Essential Oil
 Sample Name : Rosemary - Barefut
 Sample ID : 0110
 Injection Volume : 0.10
 Instrument ID : GC-3



Peak Report TIC

R.Time	Name	Area%
10.420	Cyclofenchene	0.04
11.429	Bornylene	0.03
11.545	Unidentified	0.02
12.321	Hashishene	0.02
12.445	Tricyclene	1.16
12.597	alpha-Thujene	0.19
13.027	alpha-Pinene	22.18
13.363	beta-Fenchene	0.09
13.859	alpha-Fenchene	0.14
13.963	Camphene	7.33
14.161	Unidentified	0.02
15.262	Sabinene	0.19
15.579	beta-Pinene	4.39
16.214	Myrcene	2.42
17.161	Pseudolimonene	0.04
17.310	alpha-Phellandrene	0.16
17.459	delta-3-Carene	0.09
17.984	alpha-Terpinene	0.15
18.461	para-Cymene	1.95
18.772	Limonene	3.77
18.882	beta-Phellandrene	0.12
18.988	1,8-Cineole	23.93
19.180	cis-beta-Ocimene	0.03
19.870	trans-beta-Ocimene	0.03
20.683	gamma-Terpinene	0.25
21.497	trans-Sabinene hydrate	0.03
22.523	Terpinolene	0.09
23.490	Linalool	1.15
24.168	Unidentified	0.02
24.858	alpha-Fenchol	0.02
26.810	Camphor	18.81
27.362	trans-beta-Terpineol	0.03
27.945	Isoborneol	0.02
28.396	delta-Terpineol	0.11
28.531	Borneol	2.21
29.126	Terpinen-4-ol	0.28
29.526	para-Cymen-8-ol	0.02
30.127	alpha-Terpineol	3.39
30.936	Verbenone	0.94
33.891	Geraniol	0.03
35.539	cis-Ascriadol glycol	0.02
36.270	Bornyl acetate	1.72
36.426	Isobornyl acetate	0.03
40.642	Eugenol	0.02
41.937	alpha-Ylangene	0.02
42.354	alpha-Copaene	0.06
45.180	beta-Caryophyllene	1.92
47.431	alpha-Humulene	0.21
48.626	trans-Cadina-1(6),4-diene	0.03
51.276	delta-Cadinene	0.04
55.065	Caryophyllene oxide	0.04
		100.00

Chromatogram Rosemary - Barefut



Comments:

The analysis of this Rosemary, Spain batch sample meets the expected chemical profile for authentic essential oil of *Rosmarinus 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.