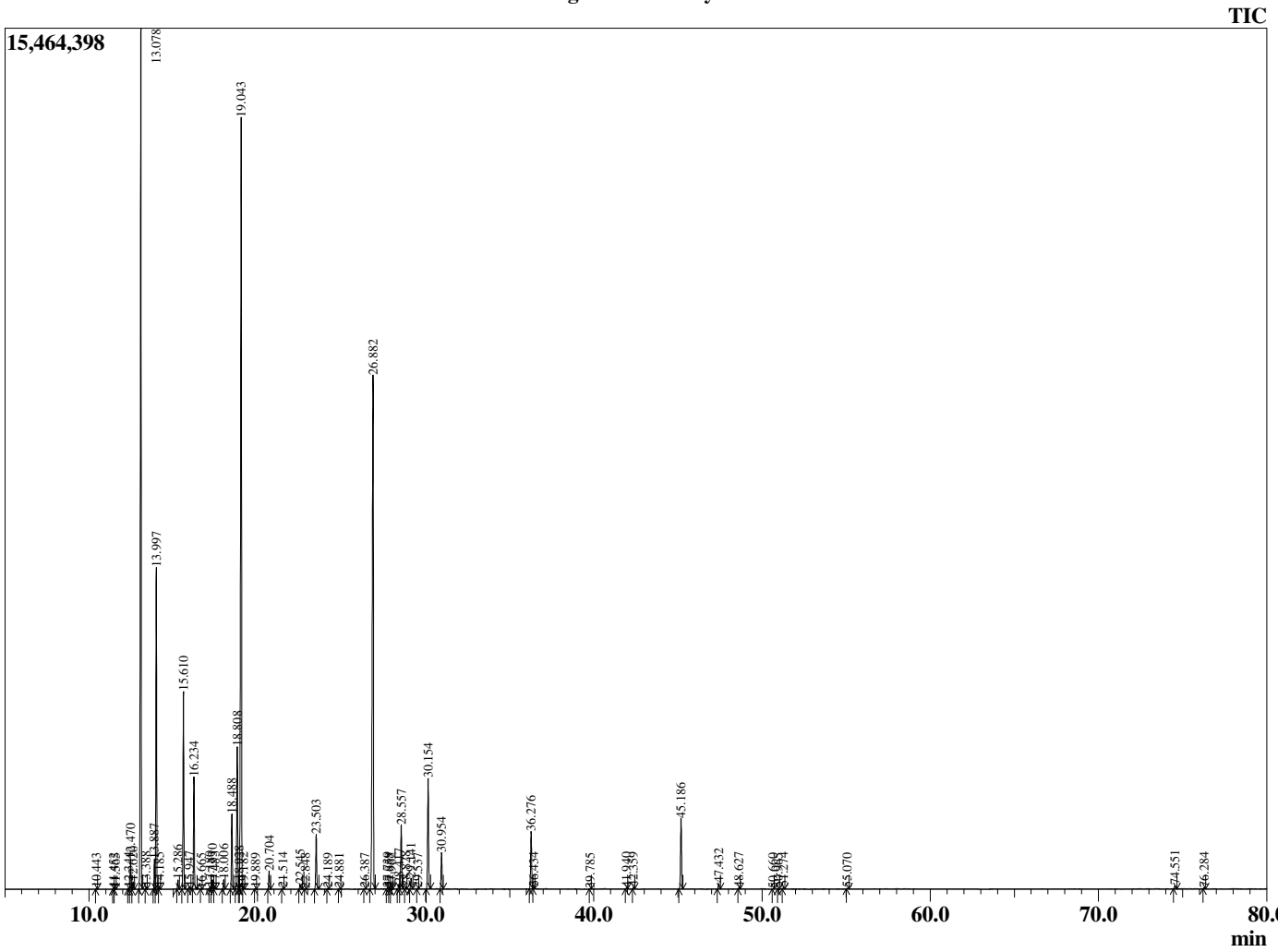
Sample Information

Analyzed by : Dr. Robert S. Pappas
Analyzed : 4/25/2020 3:08:50 AM
Sample Type : Essential Oil
Sample Name : Rosemary -Barefut
Sample ID : 0112
Injection Volume : 0.10
Instrument ID: : GC-3

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.

Peak Report TIC

R.Time	Name	Area%
10.443	Cyclofenchene	0.02
11.452	Bornylene	0.02
11.565	Unidentified	0.01
12.344	Hashishene	0.02
12.470	Tricyclene	0.66
12.620	alpha-Thujene	0.17
13.078	alpha-Pinene	21.49
13.388	beta-Fenchene	0.05
13.887	alpha-Fenchene	0.70
13.997	Camphene	7.54
14.185	Thuja-2,4(10)diene	0.04
15.286	Sabinene	0.21
15.610	beta-Pinene	4.73
15.947	3-Octanone	0.07
16.234	Myrcene	2.78
16.665	3-Octanol	0.01
17.180	Pseudolimonene	0.06
17.330	alpha-Phellandrene	0.23
17.483	delta-3-Carene	0.04
18.006	alpha-Terpinene	0.24
18.488	para-Cymene	1.92
18.808	Limonene	4.03
18.928	beta-Phellandrene	0.13
19.043	1,8-cineole	22.67
19.182	cis-beta-Ocimene	0.03
19.889	trans-beta-Ocimene	0.01
20.704	gamma-Terpinene	0.48
21.514	trans-Sabinene hydrate	0.03
22.545	Terpinolene	0.14
22.848	para-Cymenene	0.01
23.503	Linalool	1.52
24.189	Unidentified	0.02
24.881	alpha-Fenchol	0.02
26.387	trans-Pinocarveol	0.02
26.882	Camphor	18.48
27.739	Pinocamphone	0.03
27.858	Pinocarvone	0.02
27.962	Isoborneol	0.02
28.417	delta-Terpineol	0.14
28.557	Borneol	1.87
28.828	Isopinocamphone	0.06
29.141	Terpinen-4-ol	0.30
29.537	para-Cymen-8-ol	0.02
30.154	alpha-Terpineol	3.28
30.954	Verbenone	1.05
36.276	Bornyl acetate	1.77
36.434	Isobornyl acetate	0.04
39.785	Unidentified	0.01
41.940	alpha-Ylangene	0.02
42.359	alpha-Copaene	0.05
45.186	beta-Caryophyllene	2.25
47.432	alpha-Humulene	0.17
48.627	trans-Cadina-1(6),4-diene	0.03
50.660	beta-Bisabolene	0.01
50.965	gamma-Cadinene	0.02
51.274	delta-Cadinene	0.05
55.070	Caryophyllene oxide	0.02
74.551	Myrcene dimer I	0.11
76.284	Myrcene dimer II	0.03
		100.00