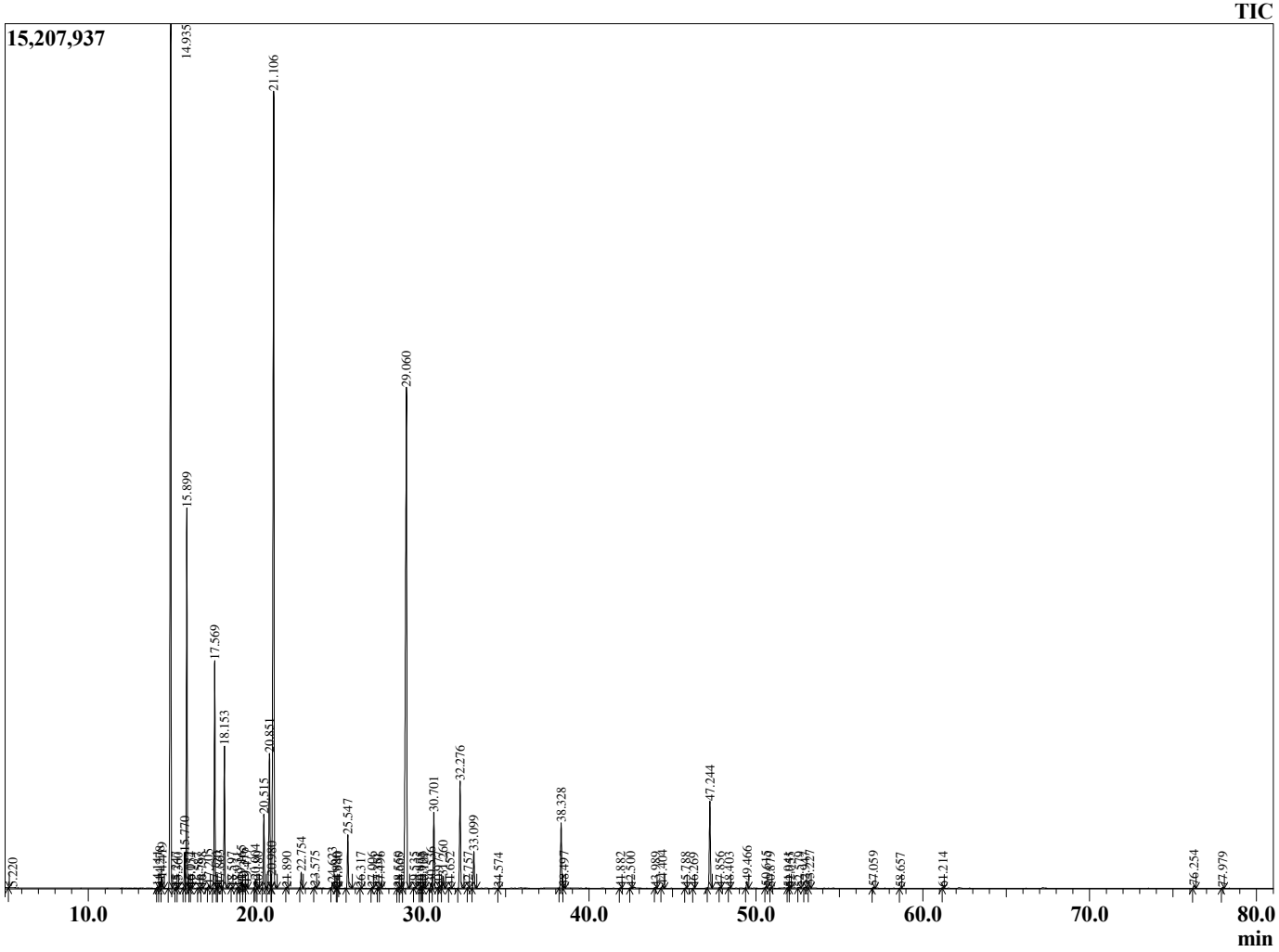
Sample Information

Analyzed by : Dr. Robert S. Pappas
Analyzed : 11/25/2020 12:10:37 AM
Sample Type : Essential Oil
Sample Name : Rosemary - Barefut
Sample ID : 0113
Injection Volume : 0.10
Instrument ID: : GC-3

Chromatogram Rosemary - Barefut



Comments:

The analysis of this Rosemary 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%
5.220	3-Methylbutanal	0.00
14.141	Hashishene	0.03
14.278	Tricyclene	0.13
14.419	alpha-Thujene	0.22
14.935	alpha-Pinene	21.89
15.247	beta-Fenchene	0.01
15.360	Unidentified	0.00
15.770	alpha-Fenchene	0.79
15.899	Camphene	8.19
16.077	Thuja-2,4(10)diene	0.01
16.154	Unidentified	0.01
16.587	Unidentified	0.00
16.798	Unidentified	0.02
17.205	Sabinene	0.07
17.569	beta-Pinene	5.01
17.720	Unidentified	0.01
17.863	Unidentified	0.08
18.153	Myrcene	3.11
18.597	3-Octanol	0.01
18.931	Unidentified	0.01
19.165	Pseudolimonene	0.16
19.316	alpha-Phellandrene	0.10
19.477	delta-3-Carene	0.09
20.004	alpha-Terpinene	0.18
20.180	meta-Cymene	0.01
20.515	para-Cymene	1.81
20.851	Limonene	3.87
20.980	beta-Phellandrene	0.10
21.106	1,8-cineole	22.93
21.890	(E)-beta-Ocimene	0.01
22.754	gamma-Terpinene	0.37
23.575	trans-Sabinene hydrate	0.05
24.623	Terpinolene	0.13
24.880	Fenchone	0.00
24.940	Dehydro-para-cymene	0.01
25.547	Linalool	1.35
26.317	Unidentified	0.01
27.006	alpha-Fenchol	0.02
27.351	cis-para-Menth-2-en-1-ol	0.00
27.496	alpha-Campholenal	0.01
28.550	trans-Pinocarveol	0.02
28.665	Unidentified	0.01
29.060	Camphor	17.90
29.535	trans-beta-Terpineol	0.01
29.875	trans-Pinocamphone	0.01
29.996	Pinocarvone	0.01
30.101	Isoborneol	0.02
30.536	delta-Terpineol	0.14
30.701	Borneol	1.97
30.977	Isopinocamphone	0.01
31.260	Terpinen-4-ol	0.31
31.652	para-Cymen-8-ol	0.02
32.276	alpha-Terpineol	2.90
32.757	Unidentified	0.01
33.099	Verbenone	0.94
34.574	Unidentified	0.01
38.328	Bornyl acetate	1.71
38.497	Isobornyl acetate	0.03
41.882	Unidentified	0.01
42.500	alpha-Cubebene	0.01
43.989	alpha-Ylangene	0.02
44.404	alpha-Copaene	0.08

R.Time	Name	Area%
45.788	Methyleugenol	0.01
46.269	cis-beta-Caryophyllene	0.01
47.244	trans-beta-Caryophyllene	2.43
47.856	beta-Copaene	0.01
48.403	Aromandendrene	0.01
49.466	alpha-Humulene	0.19
50.615	trans-Cadina-1(6),4-diene	0.05
50.879	Unidentified	0.01
51.941	alpha-Selinene	0.01
52.055	alpha-Muurolene	0.01
52.579	beta-Bisabolene	0.02
52.947	gamma-Cadinene	0.03
53.227	delta-Cadinene	0.07
57.059	Caryophyllene oxide	0.04
58.657	Humulene epoxide II	0.01
61.214	Unidentified	0.01
76.254	Myrcene dimer I	0.09
77.979	Myrcene dimer II	0.03
		100.00