

Sample Information

Analyzed by : Dr. Robert S. Pappas
 Analyzed : 7/27/2019 1:21:24 AM
 Sample Type : Essential Oil
 Sample Name : Rosemary - Helias
 Sample ID : B0323L
 Injection Volume : 0.10
 Instrument ID : GC-4

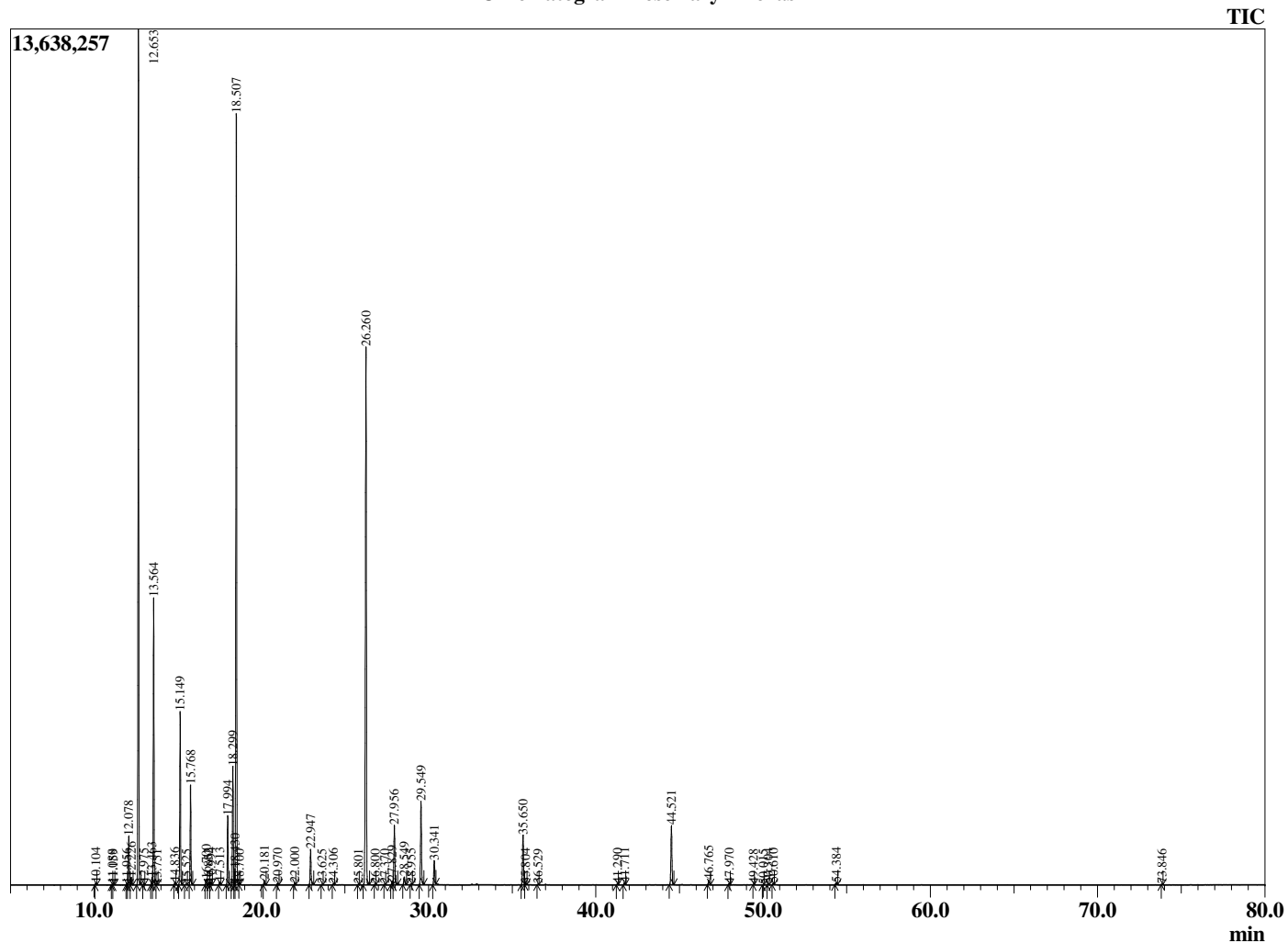


Peak Report TIC

R.Time	Name	Area%
10.104	Cyclofenchene	0.05
11.088	Bornylene	0.02
11.159	Unidentified	0.03
11.956	Hashishene	0.03
12.078	Tricyclene	1.22
12.226	alpha-Thujene	0.20
12.653	alpha-Pinene	22.37
12.975	beta-Fenchene	0.03
13.463	alpha-Fenchene	0.20
13.564	Camphene	7.55
13.751	Thuja-2,4(10)diene	0.01
14.836	Sabinene	0.07
15.149	beta-Pinene	4.76
15.525	3-Octanone	0.03
15.768	Myrcene	2.73
16.700	Pseudolimonene	0.15
16.852	alpha-Phellandrene	0.04
16.994	delta-3-Carene	0.07
17.513	alpha-Terpinene	0.08
17.994	para-Cymene	1.94
18.299	Limonene	3.53
18.430	beta-Phellandrene	0.20
18.507	1,8-cineole	23.36
18.700	cis-beta-Ocimene	0.02
20.181	gamma-Terpinene	0.14
20.970	trans-Sabinene hydrate	0.05
22.000	Terpinolene	0.06
22.947	Linalool	1.14
23.625	Unidentified	0.01
24.306	alpha-Fenchol	0.03
25.801	trans-Pinocarveol	0.01
26.260	Camphor	19.11
26.800	Unidentified	0.01
27.370	Isoborneol	0.02
27.829	delta-Terpineol	0.14
27.956	Borneol	2.05
28.549	Terpinen-4-ol	0.27
28.955	para-Cymen-8-ol	0.03
29.549	alpha-Terpineol	2.89
30.341	Verbenone	0.81
35.650	Bornyl acetate	1.81
35.804	Isobornyl acetate	0.03
36.529	Unidentified	0.01
41.290	alpha-Ylangene	0.02
41.711	alpha-Copaene	0.06
44.521	beta-Caryophyllene	2.22
46.765	alpha-Humulene	0.16
47.970	trans-Cadina-1(6),4-diene	0.04
49.428	alpha-Muurolole	0.01
50.015	beta-Bisabolene	0.01
50.304	gamma-Cadinene	0.02
50.610	delta-Cadinene	0.05
54.384	Caryophyllene oxide	0.08
73.846	Myrcene dimer I	0.01
		100.00

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

Chromatogram Rosemary - Helias



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.