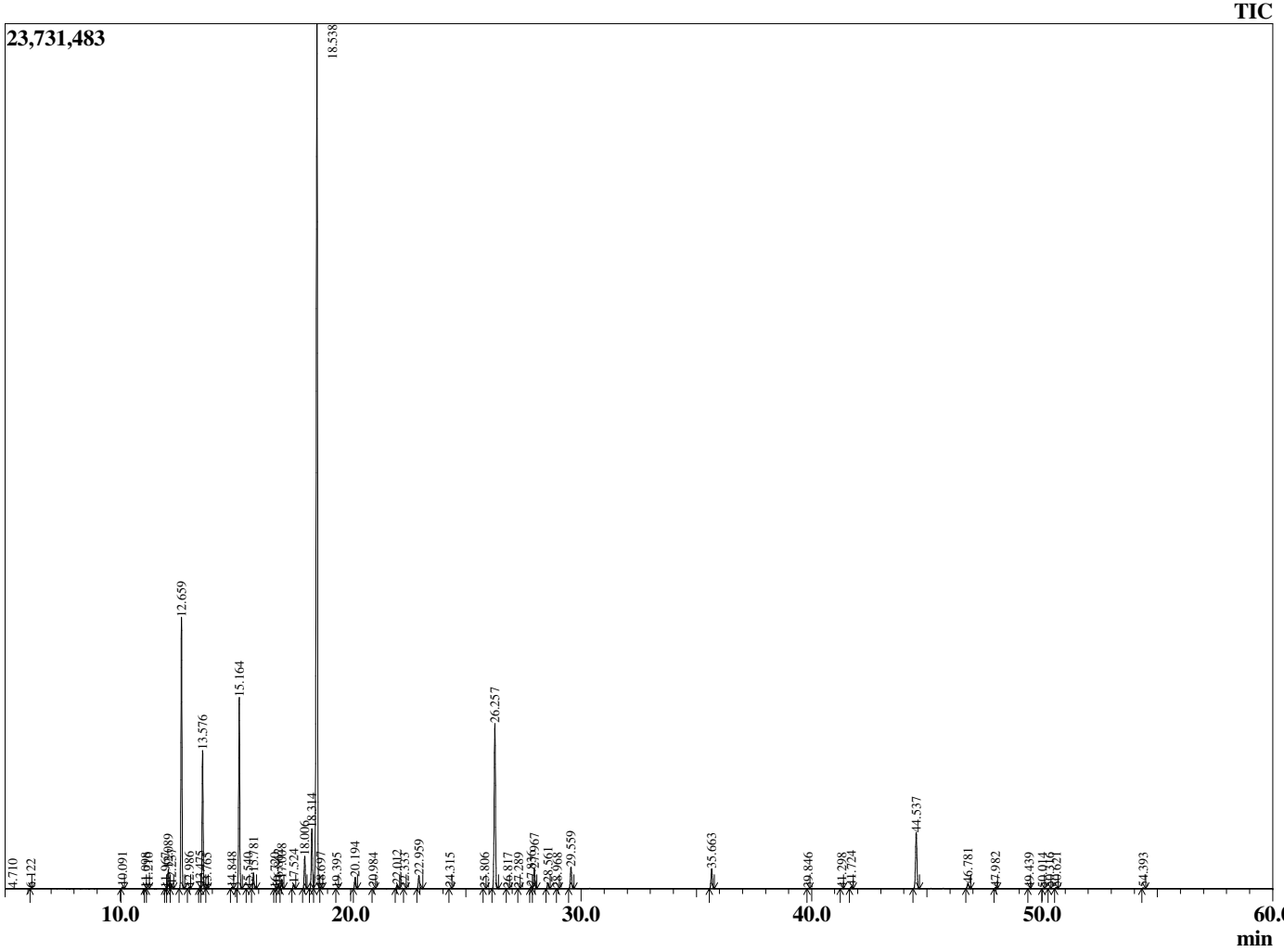
Sample Information

Analyzed by : Dr. Robert S. Pappas
Analyzed : 6/27/2019 8:24:20 PM
Sample Type : Essential Oil
Sample Name : Rosemary - Revive
Sample ID : E0C0204B
Injection Volume : 0.10
Instrument ID: : GC-4

Chromatogram Rosemary - Revive



Peak Report TIC

R.Time	Name	Area%
4.152	Valeraldehyde	0.08
4.259	2-Methyl butanal	0.04
4.710	2-Ethyl furan	0.01
6.122	Toluene	0.01
10.091	Santene	0.08
11.098	Bornylene	0.02
11.210	Unidentified	0.02
11.967	Hashishene	0.01
12.089	Tricyclene	0.79
12.237	alpha-Thujene	0.18
12.659	alpha-Pinene	11.33
12.986	beta-Fenchene	0.05
13.475	alpha-Fenchene	0.11
13.576	Camphene	5.95
13.765	Thuja-2,4(10)diene	0.01
14.848	Sabinene	0.06
15.164	beta-Pinene	8.55
15.540	3-Octanone	0.03
15.781	Myrcene	0.71
16.720	Pseudolimonene	0.02
16.862	alpha-Phellandrene	0.20
17.008	delta-3-Carene	0.44
17.524	alpha-Terpinene	0.21
18.006	para-Cymene	1.57
18.314	Limonene	3.10
18.538	1,8-cineole	47.79
18.697	cis-beta-Ocimene	0.04
19.395	trans-beta-Ocimene	0.02
20.194	gamma-Terpinene	0.56
20.984	trans-Sabinene hydrate	0.04
22.012	Terpinolene	0.19
22.333	para-Cymenene	0.01
22.959	Linalool	0.70
24.315	alpha-Fenchol	0.03
25.806	trans-Pinocarveol	0.02
26.257	Camphor	9.05
26.817	trans-beta-Terpineol	0.02
27.289	Pinocarvone	0.01
27.836	delta-Terpineol	0.12
27.967	Borneol	1.09
28.561	Terpinen-4-ol	0.32
28.968	para-Cymen-8-ol	0.01
29.559	alpha-Terpineol	1.22
35.663	Bornyl acetate	1.15
39.846	alpha-Cubebene	0.01
41.298	alpha-Ylangene	0.02
41.724	alpha-Copaene	0.12
44.537	beta-Caryophyllene	3.36
46.781	alpha-Humulene	0.30
47.982	trans-Cadina-1(6),4-diene	0.06
49.439	alpha-Muurolene	0.02
50.014	beta-Bisabolene	0.01
50.316	gamma-Cadinene	0.03
50.621	delta-Cadinene	0.07
54.393	Caryophyllene oxide	0.04
		100.00

Comments:

The analysis of this Rosemary, Morocco 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.