

### Sample Information

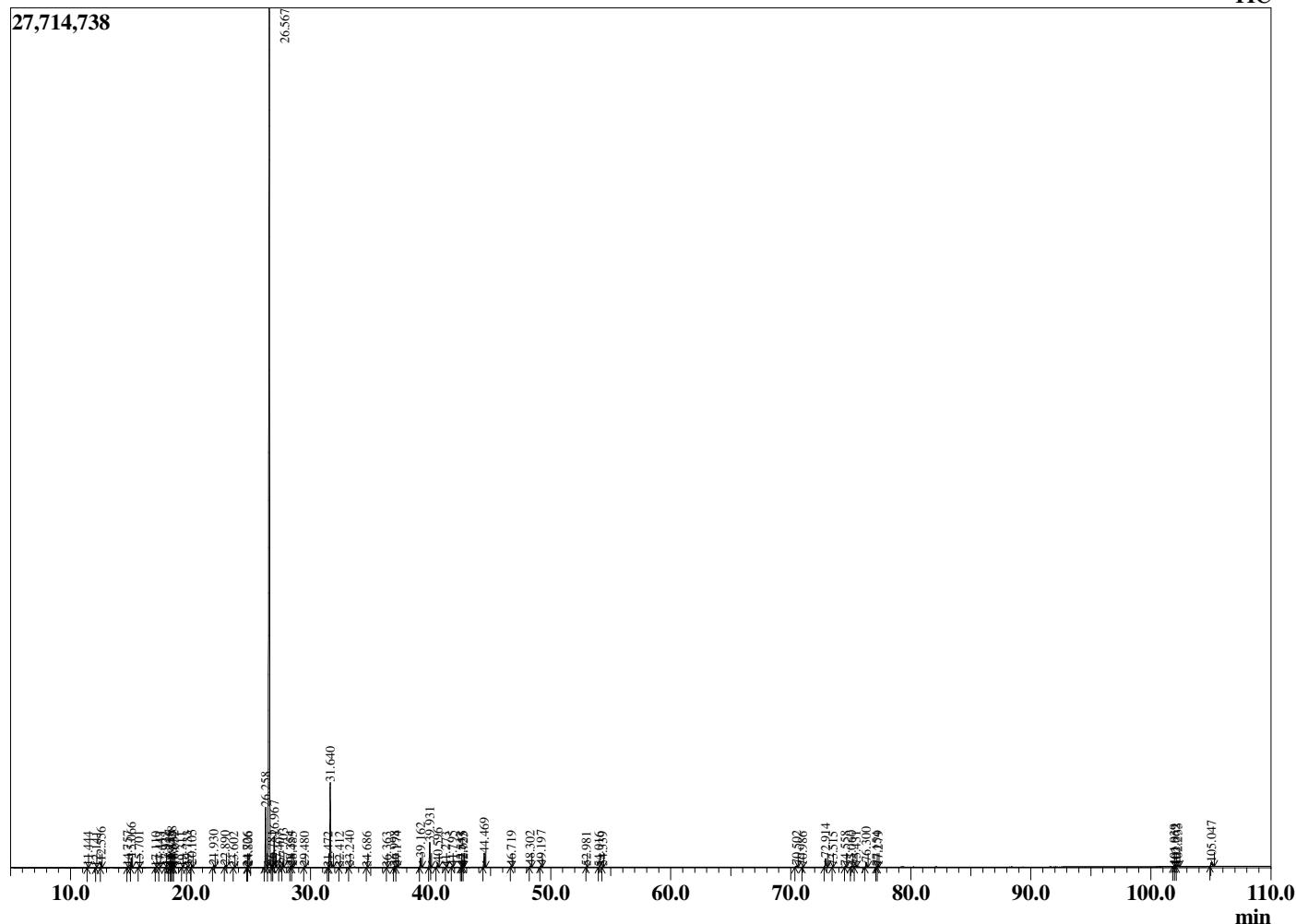
Analyzed by : Dr. Robert S. Pappas  
 Analyzed : 12/3/2018 8:32:25 PM  
 Sample Type : Essential Oil  
 Sample Name : Lemon Eucalyptus Oil, China  
 Sample ID : RB0629D  
 Injection Volume : 0.10  
 Instrument ID: : GC-3



### Peak Report TIC

R.Time	Name	Area%
11.444	Isobutyl isobutyrate	0.05
12.141	alpha-Thujene	0.03
12.556	alpha-Pinene	0.30
14.757	Sabine	0.06
15.066	beta-Pinene	0.62
15.701	Myrcene	0.09
17.110	Isoamyl isobutyrate	0.02
17.443	alpha-Terpinene	0.02
17.922	para-Cymene	0.03
18.227	Limonene	0.12
18.335	beta-Phellandrene	0.02
18.428	1,8-cineole	0.42
18.539	Unidentified	0.06
18.632	cis-beta-Ocimene	0.08
19.311	trans-beta-Ocimene	0.02
19.733	Bergamal	0.08
20.105	gamma-Terpinene	0.17
21.930	Terpinolene	0.16
22.890	Linalool	0.11
23.602	cis-Rose oxide	0.03
24.726	trans-Rose oxide	0.01
24.806	Citronellol	0.05
26.258	Neoisopulegol	4.50
26.567	Citronellal	75.72
26.781	Menthone	0.12
26.967	Isopulegol	2.50
27.407	Isomenthone	0.02
27.703	Isoisopulegol	0.27
28.354	Neoisoisopulegol	0.06
28.485	Terpinen-4-ol	0.03
29.480	alpha-Terpineol	0.04
31.472	Nerol	0.03
31.640	Citronellol	6.37
32.412	Pulegone	0.02
33.240	Geraniol	0.05
34.686	Isopulegyl acetate	0.01
36.363	Benzyl isobutyrate	0.01
36.998	Citronellic acid	0.11
37.174	4-vinyl-Guaiaconol	0.07
39.162	Citriodiol	0.74
39.931	Citronellyl acetate	2.02
40.596	Citriodiol isomer	0.35
41.273	Citriodiol isomer	0.01
41.795	Geranyl acetate	0.05
42.547	beta-Elemene	0.03
42.655	cis-Jasmone	0.08
42.725	Phenethyl isobutyrate	0.03
44.469	beta-Caryophyllene	1.19
46.719	alpha-Humulene	0.06
48.302	Germacrene D	0.11
49.197	Bicyclogermacrene	0.13
52.981	Germacrene B	0.01
54.016	Unidentified	0.01
54.339	Unidentified	0.04
70.502	Unidentified	0.16
70.986	Unidentified	0.02
72.914	Citriodiol acetal isomer	0.95
73.515	Citriodiol acetal isomer	0.02
74.558	Unidentified	0.06
75.060	Unidentified	0.06
75.431	Citriodiol acetal isomer	0.15
76.300	Unidentified	0.44
77.154	Unidentified	0.03
77.279	Unidentified	0.04
101.939	Unidentified	0.04
102.062	Unidentified	0.04
102.233	Unidentified	0.13
105.047	Unidentified	0.52
		100.00

Chromatogram Lemon Eucalyptus Oil, China



### Comments:

The analysis of this Lemon Eucalyptus, China batch sample meets the expected chemical profile for authentic essential oil of *Eucalyptus citriodora*. 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.