

Sample Information

Analyzed by : Dr. Robert S. Pappas
 Analyzed : 12/10/2018 9:22:59 PM
 Sample Type : Essential Oil
 Sample Name : Geranium Oil, Egypt
 Sample ID : Barefut-0107
 Injection Volume : 0.10
 Instrument ID : GC-3

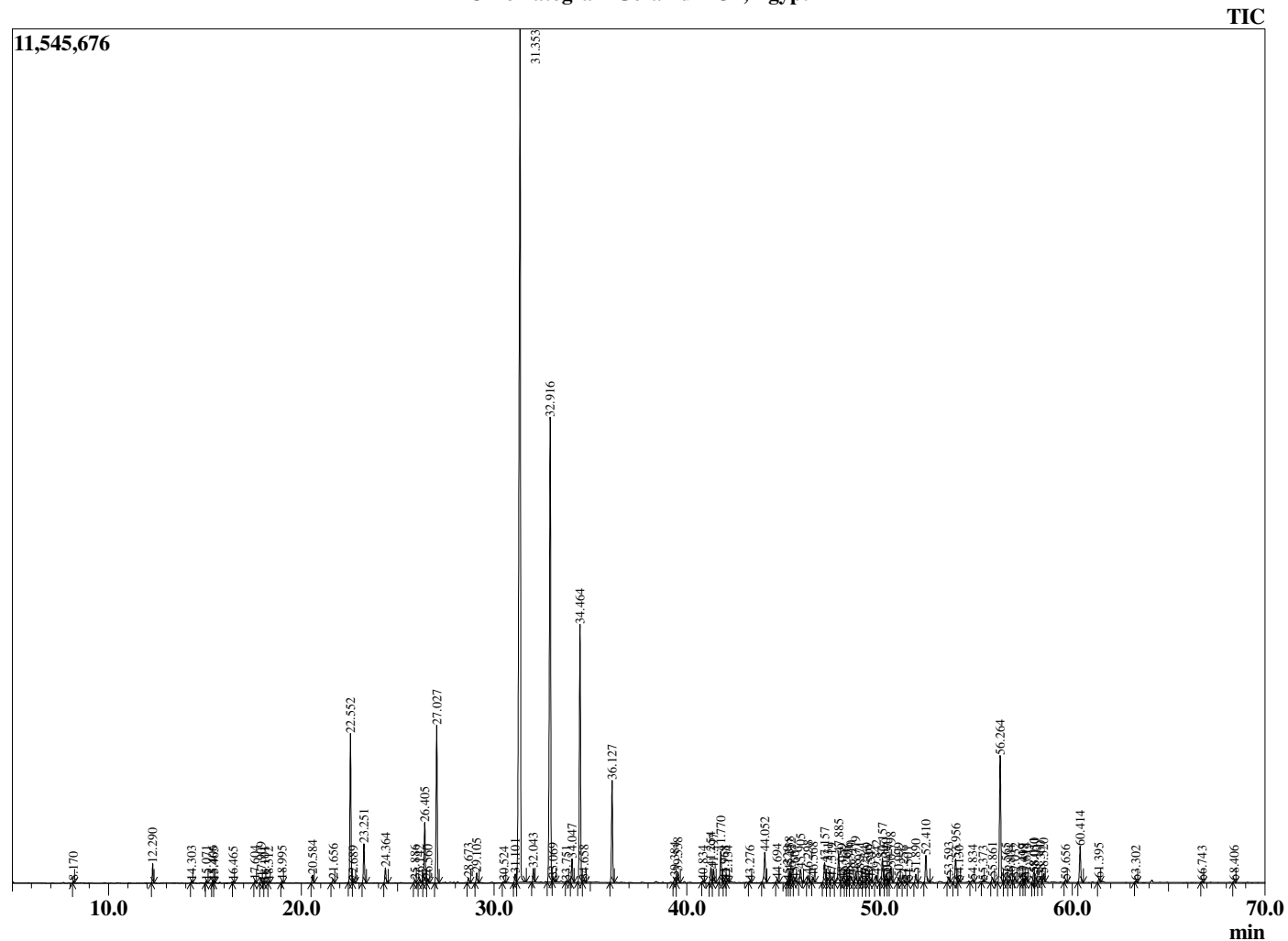


Peak Report TIC

R.Time	Name	Area%
8.170	3-Methyl pentanol	0.04
12.290	alpha-Pinene	0.42
14.303	Bois de Rose oxide	0.04
15.071	6-Methyl hept-5-en-2-one	0.05
15.406	Myrcene	0.06
15.465	Unidentified	0.03
16.465	alpha-Phellandrene	0.04
17.604	para-Cymene	0.07
17.909	Limonene	0.14
18.101	Unidentified	0.03
18.312	cis-beta-Ocimene	0.04
18.995	trans-beta-Ocimene	0.06
20.584	cis-Linalool oxide (furanoid)	0.21
21.656	trans-Linalool oxide (furanoid)	0.13
22.552	Linalool	4.15
22.689	Unidentified	0.06
23.251	cis-Rose oxide	1.09
24.364	trans-Rose oxide	0.46
25.886	Isopulegol	0.08
26.142	Citronellal	0.10
26.405	Menthone	1.78
26.560	Unidentified	0.12
27.027	Isomenthone	4.72
28.673	Isomenthol	0.15
29.105	alpha-Terpineol	0.29
30.524	Rhodinol	0.04
31.101	Nerol	0.27
31.353	Citronellol	34.93
32.043	Neral	0.40
32.916	Geraniol	15.71
33.069	Unidentified	0.14
33.751	Isogeraniol	0.04
34.047	Geranial	0.70
34.464	Citronellyl formate	7.99
34.658	Neryl formate	0.08
36.127	Geranyl formate	3.17
39.384	alpha-Cubebene	0.17
39.538	Citronellyl acetate	0.35
40.834	alpha-Ylangene	0.04
41.254	alpha-Copaene	0.49
41.397	Geranyl acetate	0.42
41.770	beta-Bourbonene	1.03
41.968	alpha-Bourbonene	0.06
42.134	beta-Elemene	0.06
43.276	alpha-Gurjunene	0.05
44.052	beta-Caryophyllene	1.10
44.694	beta-Copaene	0.12
45.229	Unidentified	0.04
45.338	Citronellyl propionate	0.37
45.422	6,9-Guaiaadiene	0.28
45.607	Unidentified	0.09
45.905	Unidentified	0.45
46.298	alpha-Humulene	0.24
46.568	Alloaromadendrene	0.14
47.157	Geranyl propionate	0.68
47.331	10-beta-H-Cadina-1(6),4-diene	0.19
47.519	trans-Cadina-1(6),4-diene	0.22
47.885	Germacrene D	1.05
48.059	Unidentified	0.15
48.266	delta-Selinene	0.04
48.376	beta-Selinene	0.17
48.510	Viridiflorene	0.31

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

Chromatogram Geranium Oil, Egypt



Comments:

The analysis of this Geranium, Egypt batch sample meets the expected chemical profile for authentic essential oil of *Pelargonium graveolens*. No contamination or adulteration was detected.

R.Time	Name	Area%
48.779	Bicyclogermacrene	0.40
48.971	alpha-Murolene	0.21
49.234	delta-Amorphene	0.07
49.369	Unidentified	0.17
49.549	Geranyl isobutyrate	0.11
49.842	gamma-Cadinene	0.25
50.157	delta-Cadinene	0.85
50.340	cis-Calamenene	0.31
50.427	Zonarene	0.13
50.598	Citronellyl butyrate	0.50
50.999	trans-Cadina-1,4-diene	0.17
51.256	Eremophilene isomer	0.07
51.501	alpha-Calacorene	0.04
51.890	Unidentified	0.29
52.410	Geranyl butyrate	0.94
53.593	Spathulenol	0.19
53.956	Phenethyl tiglate	0.88
54.130	Globulol	0.04
54.834	Geranyl isovalerate	0.10
55.373	Eudesm-5-en-11-ol	0.04
55.861	1,10-di-epi-Cubenol	0.17
56.264	10-epi-gamma-Eudesmol	4.41
56.565	1-epi-Cubenol	0.15
56.804	epi-gamma-Eudesmol	0.10
57.032	Eremoligenol isomer	0.17
57.419	Unidentified	0.13
57.498	Unidentified	0.14
57.614	Unidentified	0.14
58.011	Valerianol	0.37
58.050	alpha-Eudesmol	0.29
58.360	Unidentified	0.20
58.520	Citronellyl tiglate	0.25
59.656	Citronellyl valerate	0.08
60.414	Geranyl tiglate	1.22
61.395	(2E,6E)-Farnesol	0.13
63.302	Geranyl hexanoate	0.04
66.743	Citronellyl ester	0.04
68.406	Unidentified	0.05
		100.00