

Sample Information

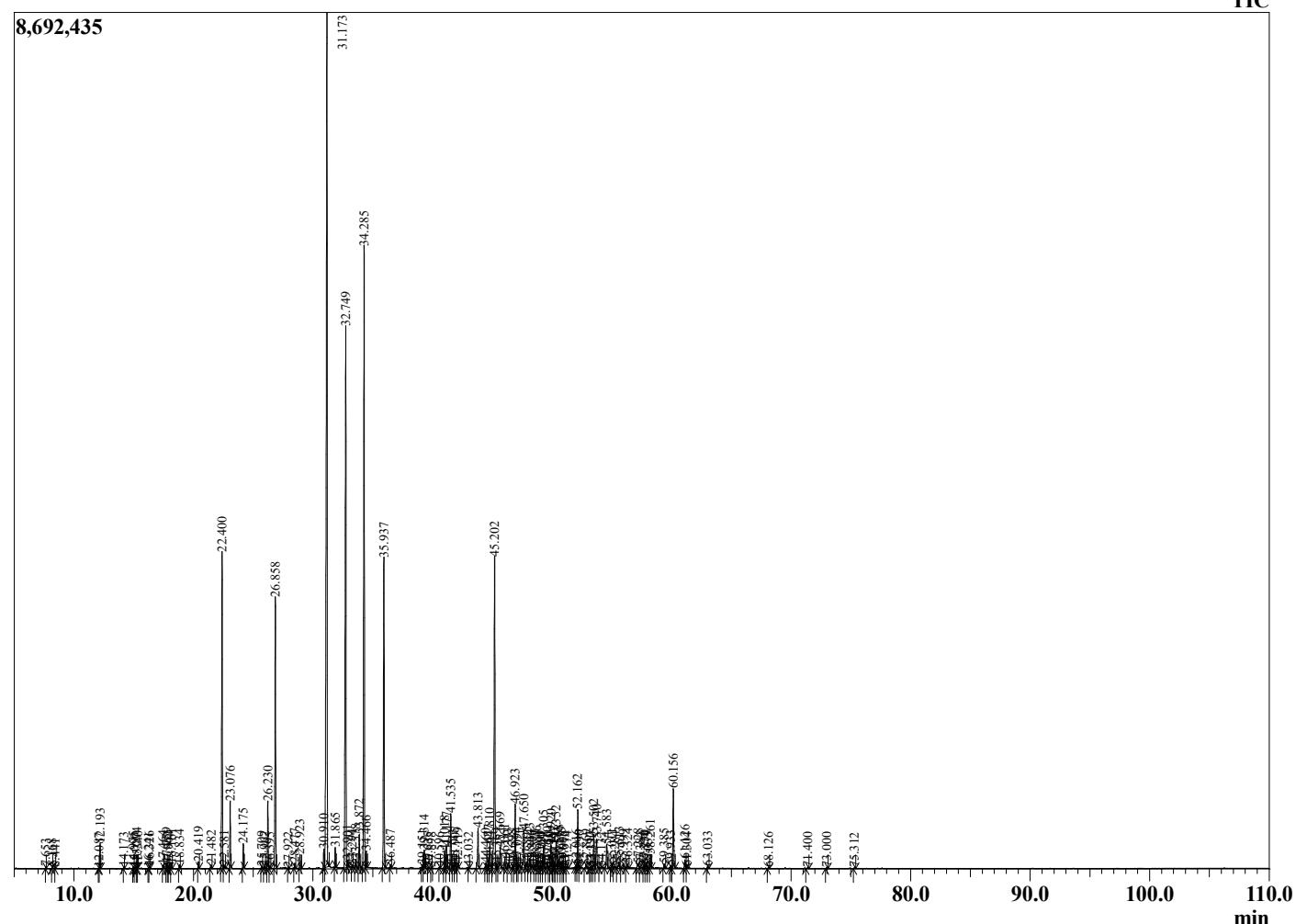
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 5/31/2023 5:05:03 PM
 Sample Type : Essential Oil
 Sample Name : Geranium Rose Oil Revive
 Sample ID : 2J
 Injection Volume : 0.10
 Instrument ID: : GC-4



Peak Report TIC

R.Time	Name	Area%
7.653	cis-Salvene	0.02
8.168	3-Methyl pentanol	0.02
8.441	2,5-Dimethylhex-5-en-3-yn-2-ol	0.01
12.087	2,7-dimethyl-Oxepine	0.01
12.193	alpha-Pinene	0.35
14.173	Bois de Rose oxide	0.02
14.975	6-methyl-Hept-5-en-2-one	0.04
15.090	1-cyclohexyl-Ethanone	0.01
15.274	Myrcene	0.10
15.340	Unidentified	0.02
16.241	dehydro-cis-Linalool oxide	0.02
16.326	alpha-Phellandrene	0.04
17.464	para-Cymene	0.06
17.759	Limonene	0.10
17.862	beta-Phellandrene	0.03
17.944	1,8-Cineole	0.03
18.161	cis-beta-Ocimene	0.08
18.834	trans-beta-Ocimene	0.06
20.419	cis-Linalool oxide (furanoid)	0.12
21.482	trans-Linalool oxide (furanoid)	0.08
22.400	Linalool	6.00
22.581	6-methyl-Heptadi-3,5-en-2-one	0.07
23.076	cis-Rose oxide	1.18
24.175	trans-Rose oxide	0.45
25.709	trans-Chrysanthemal	0.04
25.962	Citronellal	0.05
26.230	Menthone	1.26
26.395	Unidentified	0.03
26.858	Isomenthone	5.28
27.922	Unidentified	0.02
28.477	Isomenthol	0.10
28.923	alpha-Terpineol	0.28
30.910	Nerol	0.39
31.173	Citronellol	22.71
31.865	Neral	0.37
32.749	Geraniol	13.25
32.901	Unidentified	0.20
33.294	Isomenthol acetate	0.06
33.578	trans-Myrtanol	0.18
33.872	Geraniol	0.65
34.285	Citronellyl formate	13.15
34.466	Neryl formate	0.32
35.937	Geranyl formate	6.36
36.487	Myrtanyl acetate	0.07
39.151	alpha-Cubebene	0.06
39.314	Citronellyl acetate	0.38
39.635	Aciphylene	0.02
39.898	Neryl acetate	0.02
40.596	alpha-Ylangene	0.02
41.018	alpha-Copaene	0.37
41.177	Geranyl acetate	0.44
41.535	beta-Bourbonene	1.17
41.723	alpha-Bourbonene	0.07
41.907	beta-Elemene	0.15
42.119	Phenethyl Isobutyrate	0.10
43.032	alpha-Gurjunene	0.02
43.813	beta-Caryophyllene	0.97
44.460	beta-Copaene	0.10
44.677	alpha-cis-Bergamotene	0.19
44.810	alpha-Guaiane	0.56
45.202	Guaia-6,9-diene	7.32
45.369	Isogermacrene D	0.10

Chromatogram Geranium Rose Oil Revive



Comments:

The analysis of this Geranium Rose batch sample meets the expected chemical profile for authentic essential oil of *Pelargonium roseum*. 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.

R.Time	Name	Area%
45.669	Guanidiene isomer	0.55
46.061	alpha-Humulene	0.20
46.333	gamma-Caryophyllene	0.11
46.698	Unidentified	0.08
46.923	Geranyl propanoate	1.34
47.094	Cadina-1(6),4-diene	0.12
47.271	Cadinene isomer	0.10
47.650	Germacrene D	0.93
47.895	Phenethyl-2-methyl butyrate	0.18
48.143	beta-Selinene	0.24
48.306	cis-Cadina-1(6),4-diene	0.09
48.571	alpha-Selinene	0.09
48.746	alpha-Amorphene	0.17
48.990	Unidentified	0.07
49.091	trans,trans-alpha-Farnesene	0.07
49.305	Geranyl isobutyrate	0.48
49.610	gamma-Cadinene	0.15
49.750	Unidentified	0.02
49.920	delta-Cadinene	0.54
50.112	cis-Calamenene	0.19
50.197	Zonarene	0.14
50.352	Citronellyl butyrate	0.58
50.568	Europelargone A	0.21
50.779	trans-Cadina-1,4-diene	0.17
50.905	Phenylethyl Tiglate isomer	0.05
51.016	Selina-4(15),7(11)-diene	0.04
51.274	beta-Calacorene	0.06
52.016	Unidentified	0.06
52.162	Geranyl butyrate	1.21
52.290	1-nor-Bourbonanone	0.05
52.869	Citronellyl propionate	0.10
53.197	Citronellyl valerate	0.02
53.330	Unidentified	0.02
53.502	Europelargone A	0.75
53.740	Phenylethyl Tiglate	0.85
54.132	Intermedeol	0.04
54.583	Geranyl 2-methylbutyrate	0.61
55.011	Neryl 2-methylbutyrate	0.11
55.284	Humulene epoxide II	0.06
55.613	Epicubenol	0.19
55.999	Maaliol	0.13
56.324	Epicubenol	0.10
57.228	Nerolidyl acetate	0.18
57.384	delta-Cadinol	0.07
57.730	Geranyl valerate	0.08
57.874	alpha-Cadinol	0.09
58.033	Intermedeol	0.04
58.261	trans-Citronellyl tiglate	0.30
59.385	Citronellyl hexanoate	0.10
59.933	Tiglate analog	0.05
60.156	Geranyl tiglate	1.68
61.126	Geranyl hexanoate	0.19
61.304	Citronellyl hexanoate	0.04
63.033	Geraniol hexanoate	0.05
68.126	Unidentified	0.03
71.400	Unidentified	0.02
73.000	Geranyl octanoate	0.03
75.312	13-epi-Manoyl oxide	0.02
		100.00