

Sample Information

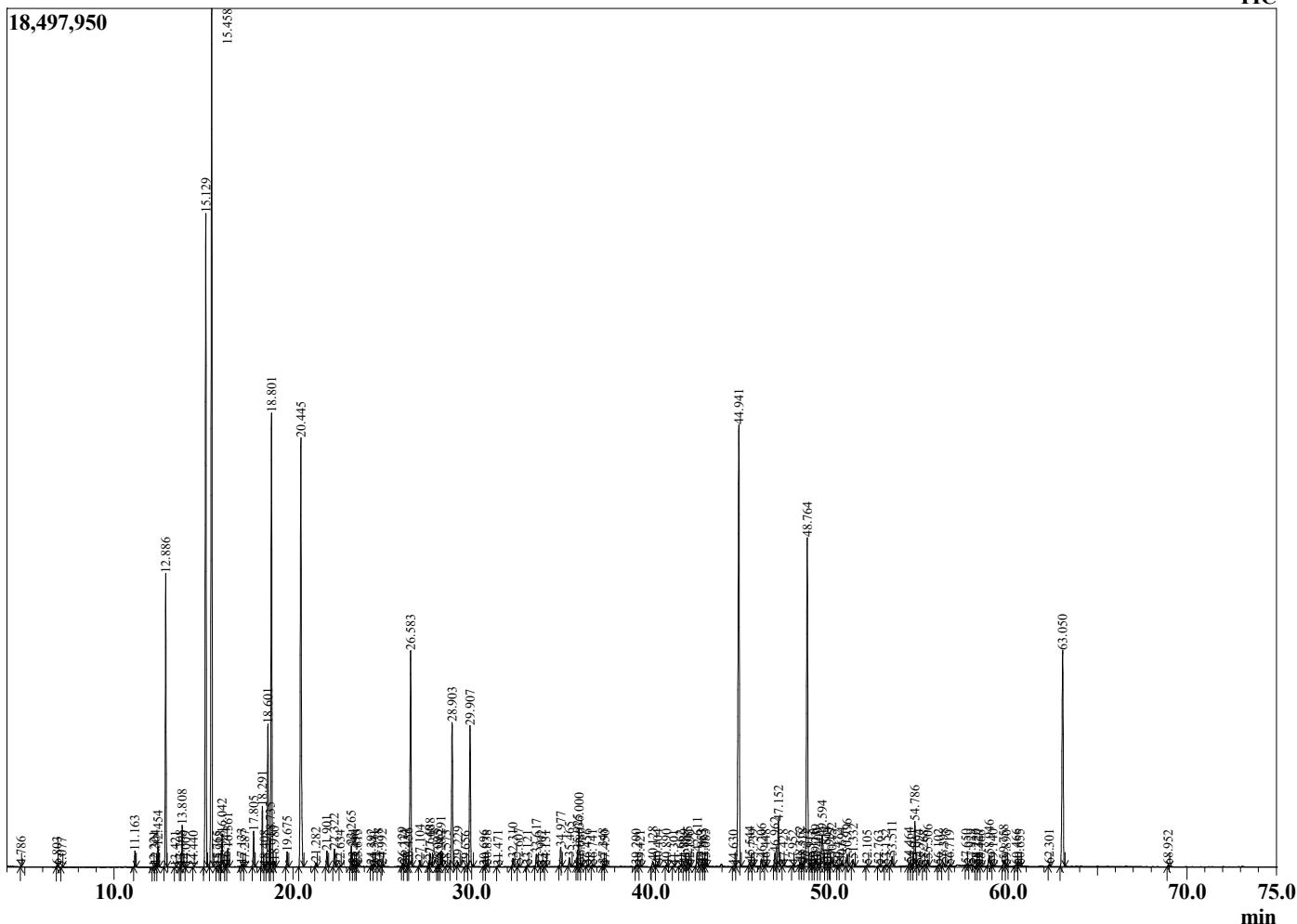
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 7/28/2022 4:57:35 PM
 Sample Type : Essential Oil
 Sample Name : Yarrow - Edens Garden
 Sample ID : BC06CAF
 Injection Volume : 0.10
 Instrument ID: : GC-3



Peak Report TIC

R.Time	Name	Area%
4.786	2-Ethylfuran	0.01
6.803	1-Octene	0.02
7.077	Octane	0.01
11.163	Santolinatriene	0.22
12.221	Hashishene	0.01
12.304	Tricyclene	0.02
12.454	alpha-Thujene	0.29
12.886	alpha-Pinene	4.29
13.421	Thujadiene isomer	0.01
13.708	alpha-Fenchene	0.01
13.808	Camphepane	0.63
14.009	Thuja-2,4(10)-diene	0.01
14.440	Benzaldehyde	0.01
15.129	Sabinene	11.68
15.458	beta-Pinene	15.76
15.765	3-Octanone	0.01
15.918	para-Menth-3-ene	0.00
16.042	Myrcene	0.54
16.244	Unidentified	0.05
16.361	Yomogi alcohol	0.29
17.133	alpha-Phellandrene	0.04
17.287	delta-3-Carene	0.01
17.805	alpha-Terpinene	0.58
18.291	para-Cymene	1.02
18.408	Unidentified	0.02
18.601	Limonene	2.58
18.735	beta-Phellandrene	0.24
18.801	1,8-Cineole	7.76
18.980	(Z)-beta-Ocimene	0.09
19.675	(E)-beta-Ocimene	0.25
20.445	Artemisia ketone	8.65
21.282	trans-Sabinene hydrate	0.07
21.901	Artemisia alcohol	0.28
22.322	Terpinolene	0.32
22.634	para-Cymenene	0.01
23.265	Linalool	0.38
23.361	cis-Sabinene hydrate	0.04
23.496	Unidentified	0.01
23.615	Nonanal	0.03
24.392	Unidentified	0.04
24.541	beta-Thujone	0.02
24.778	Chrysanthene	0.05
24.992	cis-para-Menth-2-en-1-ol	0.03
26.129	trans-Pinocarveol	0.06
26.234	trans-para-Menth-2-en-1-ol	0.03
26.456	trans-Verbenol	0.03
26.583	Camphor	4.14
27.104	trans-Chrysanthemol	0.12
27.640	Pinocarvone	0.07
27.688	beta-Artemisia acetate	0.26
28.095	Umbellulone	0.02
28.162	delta-Terpineol	0.05
28.291	Borneol	0.30
28.573	Isopinocamphone	0.01
28.903	Terpinen-4-ol	2.86
29.229	Unidentified	0.09
29.656	Unidentified	0.01
29.907	alpha-Terpineol	2.91
30.696	Verbenone	0.02
30.838	trans-Piperitol	0.03
31.471	Unidentified	0.03
32.310	trans-Chrysanthenyl acetate	0.16

Chromatogram Yarrow - Edens Garden



Comments:

The analysis of this Yarrow batch sample meets the expected chemical profile for authentic essential oil of Achillea millefolium. 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%
32.607	Unidentified	0.06
33.121	Cuminaldehyde	0.02
33.617	Linalyl acetate	0.25
33.902	Piperitone	0.01
34.131	cis-Chrysanthenyl acetate	0.02
34.977	4-Thujen-2-alpha-yl acetate	0.37
35.465	Unidentified	0.18
35.925	Geranyl butyrate	0.26
36.000	Bornyl acetate	0.81
36.080	Unidentified	0.06
36.456	trans-Ascidol glycol	0.03
36.741	trans-Pinocarvyl acetate	0.03
37.348	Isoascaridole	0.05
37.450	Unidentified	0.01
39.200	Elemene analogue	0.03
39.421	delta-Elemene	0.03
40.128	alpha-Terpinalyl acetate	0.11
40.404	Eugenol	0.04
40.890	Neryl acetate	0.03
41.301	Unidentified	0.01
41.662	alpha-Ylangene	0.02
41.889	Unidentified	0.04
42.085	alpha-Copaene	0.11
42.190	Geranyl acetate	0.02
42.611	beta-Bourbonene	0.31
42.853	beta-Cubebene	0.06
42.965	beta-Elemene	0.04
43.083	(Z)-Jasmone	0.03
44.630	Lavandulyl isobutyrate	0.02
44.941	trans-beta-Caryophyllene	10.60
45.544	beta-Copaene	0.09
45.739	trans-alpha-Bergamotene	0.02
46.206	(Z)-beta-Farnesene	0.15
46.448	Isogermacrene D	0.03
46.962	(E)-beta-Farnesene	0.26
47.152	alpha-Humulene	0.94
47.428	Alliaromodendrene	0.01
47.952	cis-Cadina-1(6),4-diene	0.02
48.362	trans-Cadina-1(6),4-diene	0.06
48.518	gamma-Curcumene	0.05
48.764	Germacrene D	7.42
48.915	Unidentified	0.04
49.116	delta-Selinene	0.03
49.239	beta-Selinene	0.18
49.409	Unidentified	0.08
49.594	alpha-Zingiberene + Bicyclogermacrene	1.00
49.814	alpha-Murolene	0.11
49.991	Lavandulyl isovalerate	0.11
50.152	delta-Amorphene+(E,E)-alpha-Farnesene	0.21
50.472	beta-Curcumene	0.02
50.694	gamma-Cadinene	0.05
50.996	delta-Cadinene	0.25
51.332	beta-Sequiphellandrene	0.15
52.105	alpha-Cadinene	0.02
52.763	alpha-Elemol	0.02
53.152	Unidentified	0.03
53.511	(E)-Nerolidol	0.22
54.464	Spathulenol	0.06
54.611	Unidentified	0.03
54.786	Caryophyllene oxide	1.01
54.994	Globulol	0.06
55.268	Unidentified	0.01
55.506	Viridiflorol	0.13

R.Time	Name	Area%
56.102	Ledol	0.01
56.398	Humulene epoxide II	0.08
56.719	Unidentified	0.02
57.650	gamma-Eudesmol	0.02
57.929	Unidentified +Caryophylla-4(12),8(13)-dien-: -	0.04
58.220	tau-Cadinol	0.03
58.327	epi-alpha-Cadinol	0.03
58.466	delta-Cadinol	0.01
58.946	beta-Eudesmol	0.27
59.140	Unidentified	0.02
59.758	Unidentified	0.14
59.890	Unidentified	0.02
60.466	alpha-Bisabolone oxide A+Hydroxy isobornyl	0.05
60.655	alpha-Bisabolol	0.04
62.301	Pentadecanal	0.04
63.050	Chamazulene	5.02
68.952	Phytone	0.03
		100.00