

Sample Information

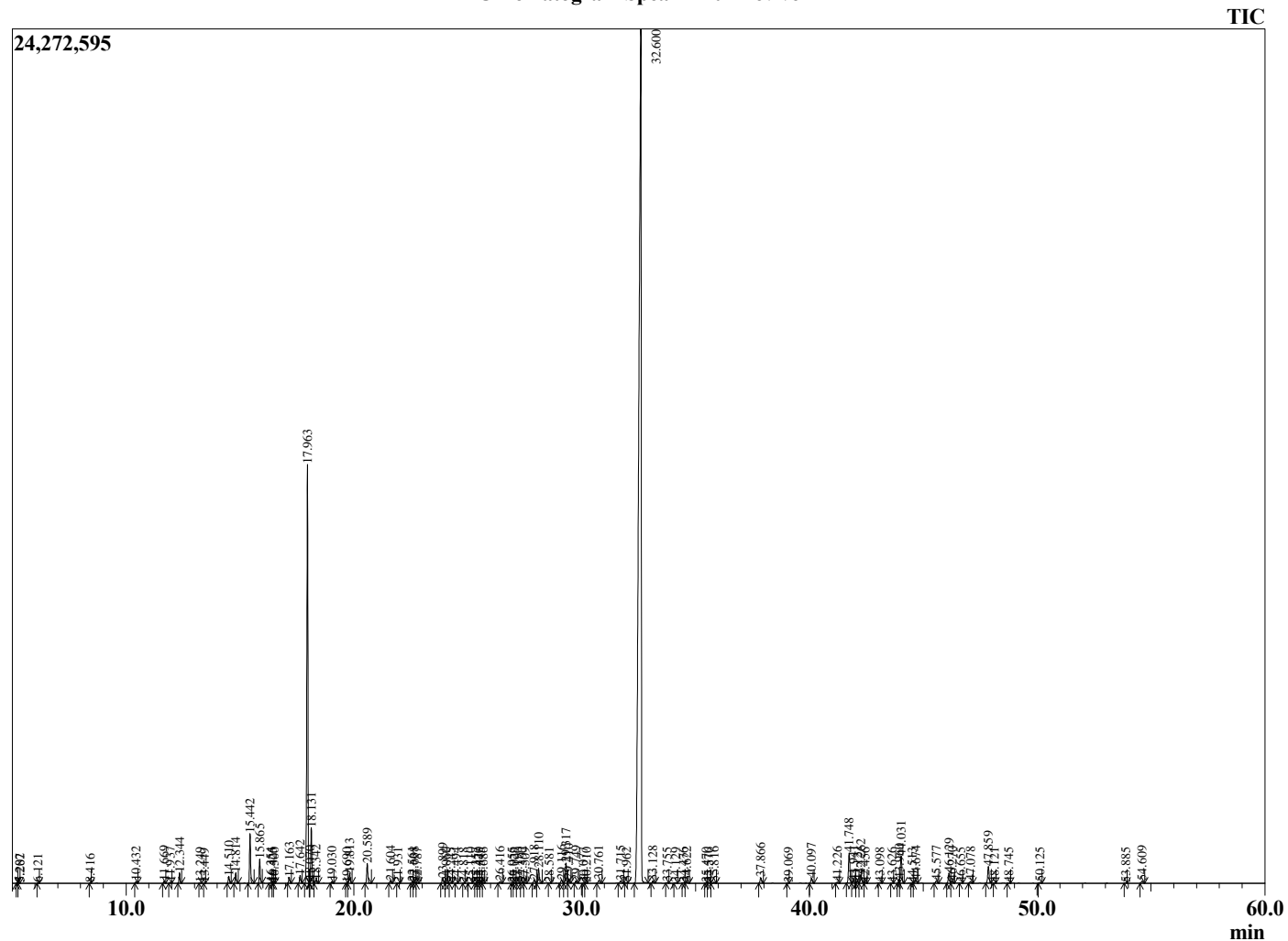
Analyzed by : Dr. Robert S. Pappas  
 Analyzed : 5/26/2021 6:30:30 PM  
 Sample Type : Essential Oil  
 Sample Name : Spearmint - Revive  
 Sample ID : 1047  
 Injection Volume : 0.10  
 Instrument ID : GC-4



Peak Report TIC

R.Time	Name	Area%
4.061	3-Methylbutanal	0.05
4.165	2-Methylbutanal	0.03
4.605	2-Ethylfuran	0.02
5.207	Isoamyl alcohol	0.01
5.282	2-Methyl butanol	0.01
6.121	Methyl 2-methylbutyrate	0.01
8.416	Ethyl 2-methylbutyrate	0.01
10.432	2,5-Diethyltetrahydrofuran	0.06
11.669	Hashishene	0.07
11.937	alpha-Thujene	0.03
12.344	alpha-Pinene	0.33
13.249	Camphene	0.01
13.449	Thujadiene isomer	0.00
14.510	Sabinene	0.24
14.814	beta-Pinene	0.36
15.442	Myrcene	1.67
15.865	3-Octanol	0.81
16.354	Pseudolimonene	0.04
16.425	Unidentified	0.01
16.500	alpha-Phellandrene	0.01
17.163	alpha-Terpinene	0.22
17.642	para-Cymene	0.30
17.963	Limonene	15.26
18.070	beta-Phellandrene	0.05
18.131	1,8-cineole	2.02
18.342	(Z)-beta-Ocimene	0.12
19.030	(E)-beta-Ocimene	0.06
19.690	Unidentified	0.01
19.813	gamma-Terpinene	0.39
20.589	trans-Sabinene hydrate	0.76
21.604	Terpinolene	0.10
21.931	para-Cymenene	0.01
22.561	Linalool	0.05
22.638	cis-Sabinene hydrate	0.06
22.787	2-Methylbutyl-2-methylbutyrate	0.02
23.899	3-Octyl acetate	0.21
24.060	trans-para-Mentha-2,8-dien-1-ol	0.01
24.245	trans-para-Menth-2-en-1-ol	0.03
24.494	Unidentified	0.01
24.818	cis-Limonene oxide	0.00
25.110	trans-Limonene oxide	0.03
25.357	trans-Pinocarveol	0.02
25.470	Unidentified	0.03
25.545	Unidentified	0.01
25.686	Unidentified	0.01
26.416	Menthone	0.08
26.955	Unidentified	0.01
27.029	Isomenthone	0.02
27.190	para-Mentha-1,5-dien-8-ol	0.02
27.392	delta-Terpineol	0.05
27.509	endo-Borneol	0.03
27.918	Menthol	0.14
28.110	Terpinen-4-ol	0.64
28.581	Unidentified	0.01
29.116	alpha-Terpineol	0.15
29.317	(Z)-Dihydrocarvone	0.96
29.410	Dihydrocarveol	0.15
29.749	(E)-Dihydrocarvone	0.09
30.077	Unidentified	0.01
30.210	Octyl acetate	0.00
30.761	trans-Carveol	0.14
31.715	cis-Carveol	0.11

Chromatogram Spearmint - Revive



Comments:

The analysis of this Spearmint batch sample meets the expected chemical profile for authentic essential oil of *Mentha spicata*. 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%
31.962	(Z)-3-Hexenyl isovalerate	0.03
32.600	Carvone	67.65
33.128	Piperitone	0.09
33.755	Unidentified	0.03
34.129	Unidentified	0.02
34.476	Unidentified	0.01
34.622	Unidentified	0.05
35.470	Unidentified	0.03
35.576	Menthyl acetate	0.03
35.816	Unidentified	0.05
37.866	trans-Dihydrocarvyl acetate	0.24
39.069	Myrcen-8-yl acetate	0.01
40.097	cis-Caryyl acetate	0.22
41.226	alpha-Copaene	0.05
41.748	beta-Bourbonene	1.42
41.941	alpha-Bourbonene	0.11
42.121	beta-Elemene	0.09
42.262	(Z)-Jasmone	0.41
42.456	Unidentified	0.02
43.098	cis-beta-Caryophyllene	0.02
43.626	Unidentified	0.01
43.960	beta-Ylangene	0.12
44.031	trans-beta-Caryophyllene	1.29
44.513	Unidentified	0.01
44.674	beta-Copaene	0.14
45.577	6,9-Guanidiene	0.11
46.129	(E)-beta-Farnesene	0.46
46.270	alpha-Humulene	0.08
46.655	Unidentified	0.01
47.078	trans-Cadina-1(6),4-diene	0.08
47.859	Germacrene D	0.75
48.121	Phenethyl isovalerate	0.01
48.745	Bicyclogermacrene	0.01
50.125	delta-Cadinene	0.04
53.885	Unidentified	0.01
54.609	Viridiflorol	0.11
		100.00