

Sample Information

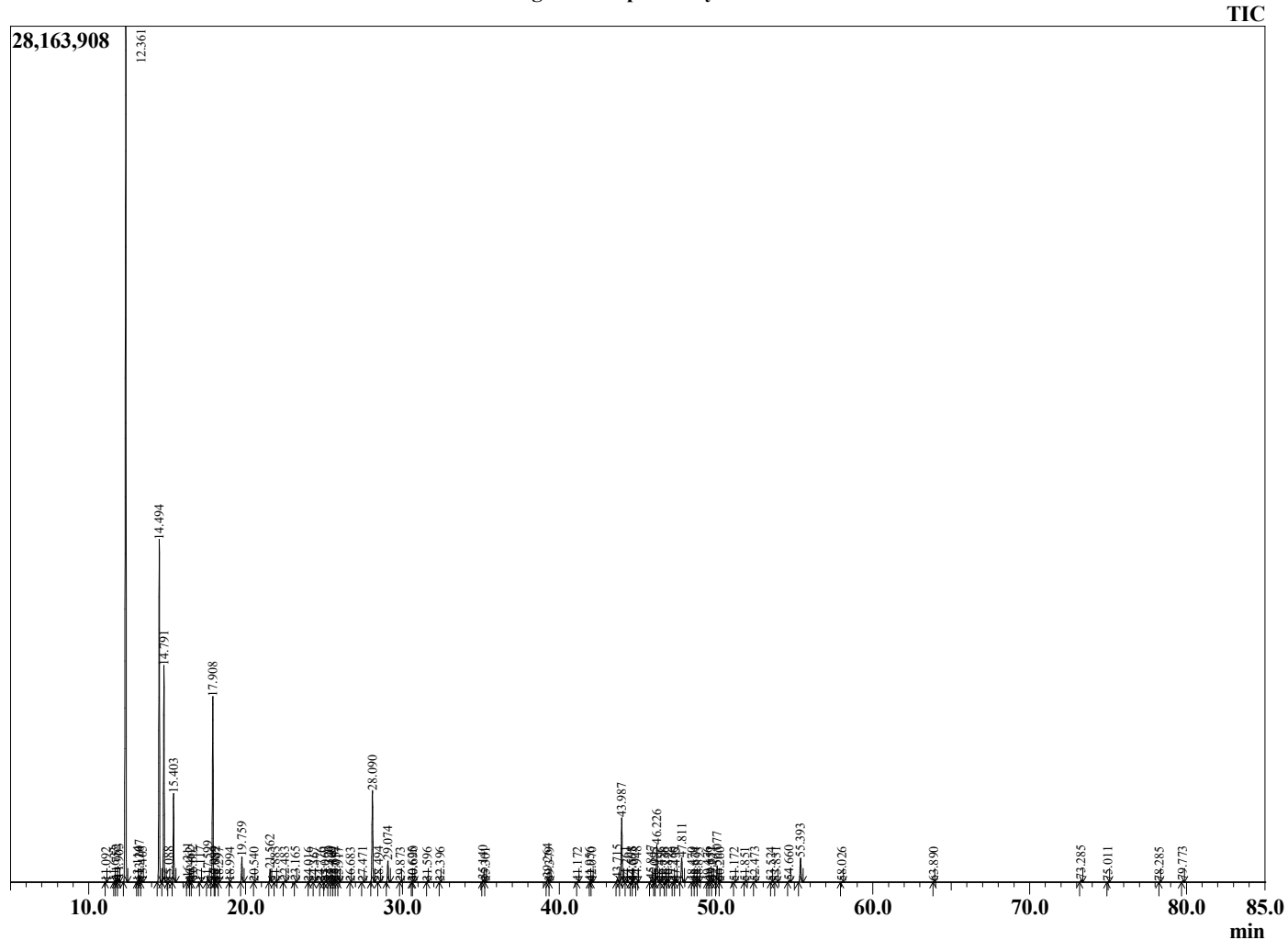
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 12/1/2021 10:21:45 PM
 Sample Type : Essential Oil
 Sample Name : Juniper Berry Oil - Barefut
 Sample ID : 0107
 Injection Volume : 0.10
 Instrument ID : GC-4



Peak Report TIC

R.Time	Name	Area%
11.092	2,6-Dimethyl-4-octene	0.01
11.633	Hashishene	0.01
11.752	Tricyclene	0.10
11.903	alpha-Thujene	0.14
12.361	alpha-Pinene	43.02
13.114	alpha-Fenchene	0.03
13.207	Camphene	0.28
13.405	Thuja-2,4(10)-diene	0.05
14.494	Sabinene	14.94
14.791	beta-Pinene	8.95
15.088	Camphene	0.02
15.403	Myrcene	3.78
16.311	Pseudolimonene	0.19
16.462	alpha-Phellandrene	0.01
16.602	delta-3-Carene	0.10
17.117	alpha-Terpinene	0.02
17.599	para-Cymene	0.29
17.908	Limonene	8.42
17.999	beta-Phellandrene	0.03
18.082	1,8-Cineole	0.02
18.297	cis-beta-Ocimene	0.00
18.994	trans-beta-Ocimene	0.00
19.759	gamma-Terpinene	1.17
20.540	trans-Sabinene hydrate	0.00
21.562	Terpinolene	0.61
21.883	para-Cymenene	0.03
22.483	alpha-Pinene oxide	0.05
23.165	Unidentified	0.04
24.016	trans-para-Mentha-2,8-dienol	0.01
24.367	alpha-Campholenal	0.02
24.776	cis-Limonene oxide	0.01
25.069	trans-Limonene oxide	0.02
25.320	trans-Pinocarveol	0.07
25.460	Epoxyterpinolene	0.02
25.642	trans-Verbenol	0.07
25.757	Camphor	0.01
25.917	Unidentified	0.01
26.683	trans-Pinocamphone	0.01
27.471	Borneol	0.03
28.090	Terpinen-4-ol	4.84
28.494	para-Cymen-8-ol	0.03
29.074	alpha-Terpineol	1.12
29.873	Verbenone	0.02
30.625	Unidentified	0.01
30.690	trans-Carveol	0.03
31.596	cis-Carveol	0.01
32.396	Carvone	0.01
35.140	Bornyl acetate	0.11
35.301	Isobornyl acetate	0.01
39.264	alpha-Terpinyl acetate	0.22
39.379	gamma-Terpinyl acetate	0.02
41.172	alpha-Copaene	0.02
41.956	Unidentified	0.00
42.070	beta-Elemene	0.01
43.715	alpha-Cedrene	0.21
43.987	trans-beta-Caryophyllene	3.76
44.261	beta-Cedrene	0.03
44.598	gamma-Elemene	0.03
44.665	Unidentified	0.00
44.948	cis-Thujopsene	0.04
45.847	Aromadendrene	0.10
46.095	Unidentified	0.01

Chromatogram Juniper Berry Oil - Barefut



Comments:

The analysis of this Juniper Berry batch sample meets the expected chemical profile for authentic essential oil of *Juniperus communis*. 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%
46.226	alpha-Humulene	2.20
46.496	Alloaromadendrene	0.01
46.736	alpha-Acoradiene	0.01
46.892	beta-Acoradiene	0.01
47.260	trans-Cadina-1(6),4-diene	0.02
47.435	gamma-Muurolene	0.02
47.811	Germacrene D	1.41
48.470	Unidentified	0.01
48.674	beta-Alaskene + Bicyclogermacrene	0.03
48.893	alpha-Amorphene	0.03
49.476	Unidentified	0.02
49.652	alpha-Alaskene	0.05
49.771	gamma-Cadinene	0.05
50.077	delta-Cadinene	0.91
50.260	trans-Calamenene	0.01
51.172	alpha-Cadinene	0.01
51.851	Elemol	0.02
52.473	Germacrene B	0.04
53.524	Unidentified	0.01
53.831	Caryophyllene oxide	0.04
54.660	Unidentified	0.10
55.393	Cedrol	1.51
58.026	Cubenol	0.02
63.890	Cedryl acetate	0.01
73.285	Myrcene dimer I	0.11
75.011	Myrcene dimer II	0.03
78.285	Abietatriene	0.01
79.773	Abietadiene	0.06
		100.00