

Sample Information

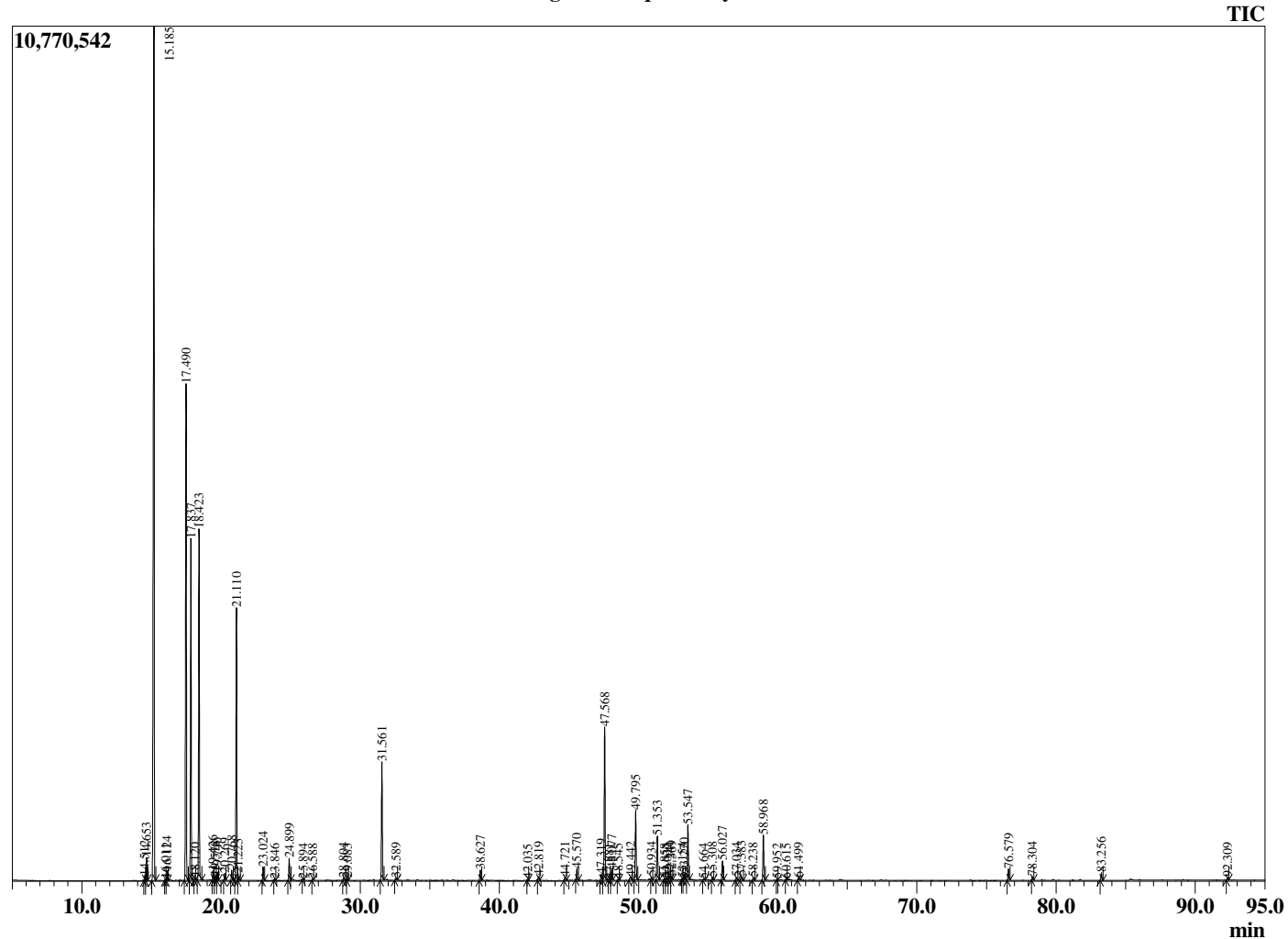
Analyzed by : Dr. Robert S. Pappas  
 Analyzed : 10/4/2019 5:56:27 AM  
 Sample Type : Essential Oil  
 Sample Name : Juniper Berry - Barefut  
 Sample ID : 0106  
 Injection Volume : 0.10  
 Instrument ID : GC-2



Peak Report TIC

R.Time	Name	Area%
14.512	Tricyclene	0.11
14.653	alpha-Thujene	0.58
15.185	alpha-Pinene	31.12
16.011	alpha-Fenchene	0.04
16.124	Camphene	0.23
17.490	Sabinene	15.29
17.837	beta-Pinene	9.66
18.120	Camphene	0.07
18.423	Myrcene	10.37
19.426	Pseudolimonene	0.26
19.578	alpha-Phellandrene	0.11
19.740	delta-3-Carene	0.20
20.269	alpha-Terpinene	0.19
20.768	para-Cymene	0.30
21.110	Limonene	8.17
21.223	beta-Phellandrene	0.19
23.024	gamma-Terpinene	0.39
23.846	trans-Sabinene hydrate	0.04
24.899	Terpinolene	0.66
25.894	alpha-Pinene oxide	0.03
26.588	Unidentified	0.05
28.804	trans-Pinocarveol	0.11
29.083	trans-Verbenol	0.07
31.561	Terpinen-4-ol	3.80
32.589	Myrtenol	0.10
38.627	Bornyl acetate	0.32
42.035	delta-Elementene	0.03
42.819	alpha-Cubebene	0.14
44.721	alpha-Copaene	0.13
45.570	beta-Elementene	0.36
47.319	alpha-Cedrene	0.25
47.568	beta-Caryophyllene	5.52
47.881	beta-Cedrene	0.03
48.077	gamma-Elementene	0.37
48.545	cis-Thujopsene	0.05
49.442	trans-beta-Farnesene	0.18
49.795	alpha-Humulene	2.41
50.934	trans-Cadina-1(6),4-diene	0.11
51.353	Germacrene D	1.53
51.858	beta-Selinene	0.06
52.032	trans-Muurolo-4(14),5-diene	0.06
52.241	Bicyclogermacrene	0.18
52.369	alpha-Muurolole	0.12
53.154	alpha-Alaskene	0.04
53.270	gamma-Cadinene	0.19
53.547	delta-Cadinene	1.88
54.664	alpha-Cadinene	0.06
55.308	Elemol	0.10
56.027	Germacrene B	0.66
57.034	Germacren D-4-ol	0.11
57.383	Caryophyllene oxide	0.17
58.238	Unidentified	0.10
58.968	Cedrol	1.61
59.952	1-epi-Cubenol	0.03
60.615	Unidentified	0.05
61.499	alpha-Cadinol	0.10
76.579	Myrcene dimer I	0.41
78.304	Myrcene dimer II	0.13
83.256	Abietadiene	0.28
92.309	4-epi-Abietal	0.10
		100.00

Chromatogram Juniper Berry - 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.