

Sample Information

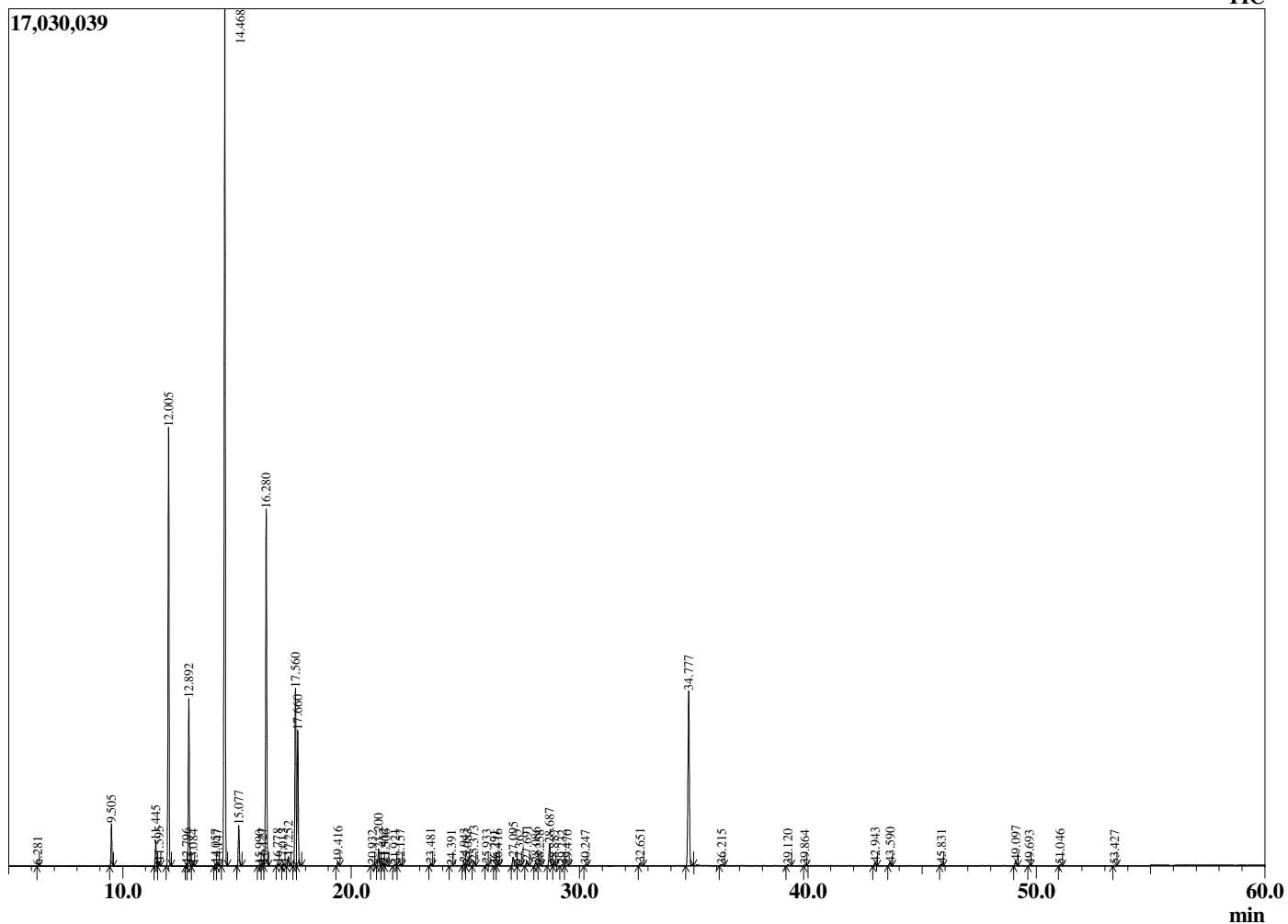
Analyzed by : Dr. Robert S. Pappas  
 Analyzed : 7/20/2019 2:39:32 PM  
 Sample Type : Essential Oil  
 Sample Name : Balsam Fir Needle - Revive  
 Sample ID : C1B1211F  
 Injection Volume : 0.10  
 Instrument ID : GC-3



Peak Report TIC

R.Time	Name	Area%
6.281	Hexyl methyl ether	0.01
9.505	Santene	1.32
11.445	Tricyclene	0.88
11.595	alpha-Thujene	0.15
12.005	alpha-Pinene	15.41
12.796	alpha-Fenchene	0.07
12.892	Camphene	5.87
13.084	Thuja-2,4(10)diene	0.04
14.057	Unidentified	0.07
14.147	Sabinene	0.06
14.468	beta-Pinene	34.08
15.077	Myrcene	1.53
15.990	Unidentified	0.04
16.127	alpha-Phellandrene	0.10
16.280	delta-3-Carene	13.85
16.778	alpha-Terpinene	0.06
17.013	Unidentified	0.07
17.252	para-Cymene	0.37
17.560	Limonene	7.15
17.660	beta-Phellandrene	5.20
19.416	gamma-Terpinene	0.15
20.932	Isoterpinolene	0.04
21.200	Terpinolene	0.72
21.412	Fenchone	0.12
21.506	para-Cymenene	0.08
21.921	Unidentified	0.06
22.157	Linalool	0.09
23.481	alpha-Fenchol	0.09
24.391	cis-Limonene oxide	0.02
24.943	trans-Pinocarveol	0.12
25.083	Unidentified	0.06
25.373	Camphor	0.21
25.933	trans-beta-Terpineol	0.06
26.291	Pinocamphone	0.02
26.416	Pinocarvone	0.05
27.095	Borneol	0.43
27.362	Isopinocamphone	0.06
27.691	Terpinen-4-ol	0.24
28.086	Cryptone	0.18
28.258	Unidentified	0.03
28.687	alpha-Terpineol	1.07
28.887	Estragole	0.04
29.232	Unidentified	0.04
29.470	Verbenone	0.02
30.247	alpha-Fenchyl acetate	0.04
32.651	Piperitone	0.14
34.777	Bornyl acetate	8.62
36.215	Unidentified	0.07
39.120	Unidentified	0.06
39.864	Unidentified	0.02
42.943	Junipene	0.16
43.590	beta-Caryophyllene	0.17
45.831	alpha-Humulene	0.09
49.097	beta-Bisabolene	0.23
49.693	delta-Cadinene	0.02
51.046	trans-alpha-Bisabolene	0.04
53.427	Caryophyllene oxide	0.03
		100.00

Chromatogram Balsam Fir Needle - Revive



Comments:

The analysis of this Balsam Fir Needle batch sample meets the expected chemical profile for authentic essential oil of *Abies balsamea*. 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.