

Sample Information

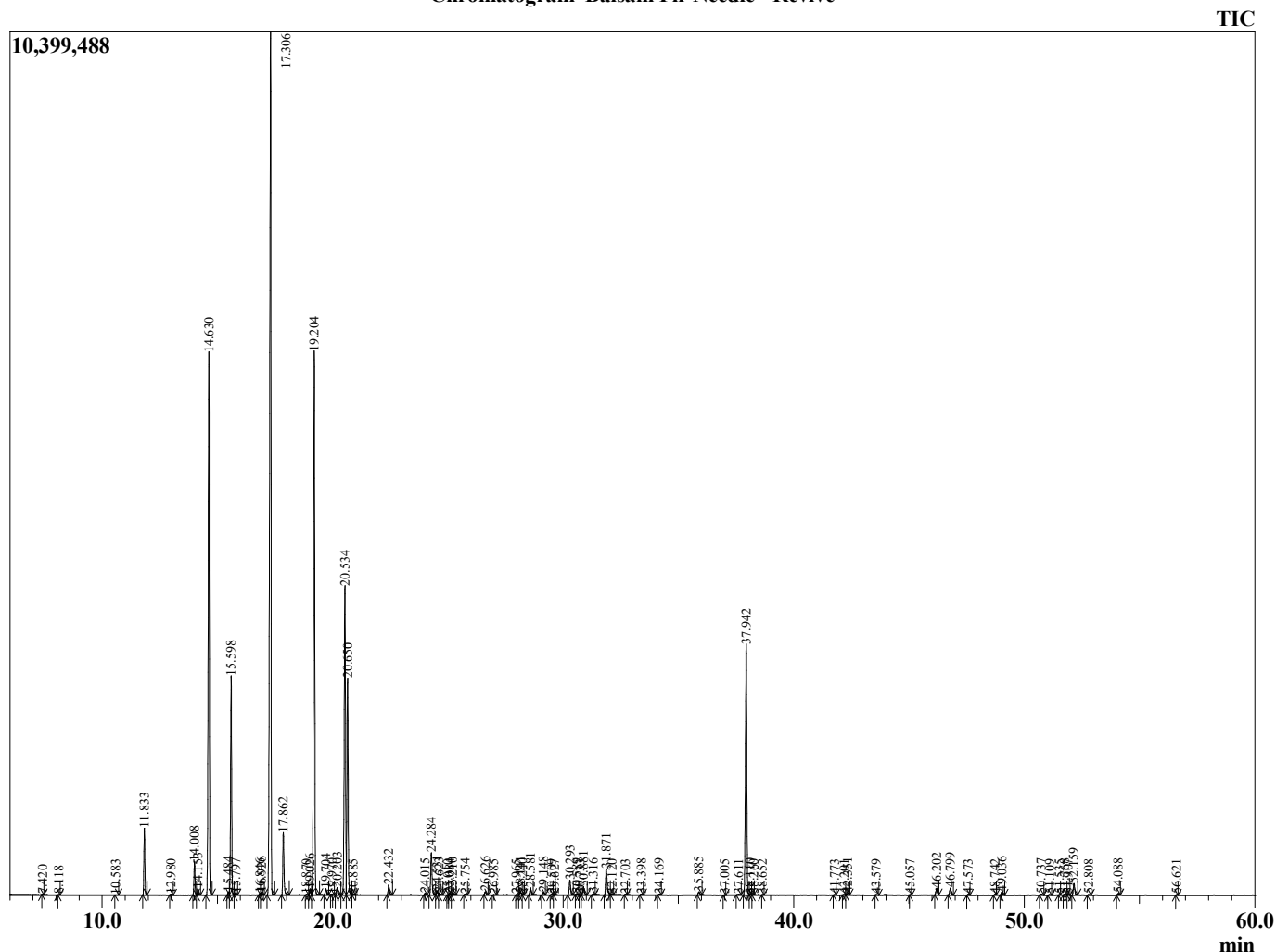
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 3/23/2022 10:53:00 PM
 Sample Type : Essential Oil
 Sample Name : Balsam Fir Needle - Revive
 Injection Volume : 0.10
 Lot Number : 1293
 Instrument : GC-2



Peak Report TIC

R.Time	Name	Area%
7.420	Toluene	0.01
8.118	Hexyl methyl ether	0.01
10.583	Hex-3(Z)-enol	0.00
11.833	Santene	1.57
12.980	Unidentified	0.02
14.008	Tricyclene	0.84
14.153	alpha-Thujene	0.17
14.630	alpha-Pinene	14.64
15.484	alpha-Fenchene	0.08
15.598	Camphene	5.72
15.797	Thuja-2,4(10)-diene	0.04
16.846	meta-Cymene	0.04
16.926	Sabinene	0.09
17.306	beta-Pinene	27.52
17.862	Myrcene	1.78
18.870	Pseudolimonene	0.02
19.026	alpha-Phellandrene	0.19
19.204	delta-3-Carene	16.35
19.704	alpha-Terpinene	0.18
19.970	Unidentified	0.02
20.203	para-Cymene	0.25
20.534	Limonene	9.71
20.650	beta-Phellandrene	5.99
20.885	Unidentified	0.02
22.432	gamma-Terpinene	0.32
24.015	Isoterpinolene	0.05
24.284	Terpinolene	1.33
24.531	Fenchone	0.13
24.623	para-Cymenene	0.07
25.010	Unidentified	0.01
25.084	Unidentified	0.05
25.210	Linalool	0.09
25.754	alpha-Thujone	0.03
26.626	alpha-Fenchol	0.11
26.985	Unidentified	0.01
27.965	Nopinone	0.01
28.141	trans-Pinocarveol	0.10
28.240	Unidentified	0.02
28.581	Camphor	0.23
29.148	trans-beta-Terpineol	0.10
29.509	Pinocamphone	0.01
29.627	Pinocaryone	0.01
30.293	Borneol	0.48
30.589	Isopinocamphone	0.03
30.733	Unidentified	0.01
30.881	Terpinen-4-ol	0.28
31.316	Cryptone	0.03
31.871	alpha-Terpineol	0.97
32.120	Estragole	0.02
32.703	Verbenone	0.01
33.398	alpha-Fenchyl acetate	0.03
34.169	Thymol methyl ether	0.03
35.885	Piperitone	0.11
37.005	Unidentified	0.01
37.611	Unidentified	0.03
37.942	Bornyl acetate	8.58
38.110	Isobornyl acetate	0.02
38.260	Thymol	0.01
38.652	Unidentified	0.01
41.773	Unidentified	0.01
42.201	Unidentified	0.02
42.351	alpha-Longipinene	0.07

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 GC/MS quality analysis reflect the chemical composition of the oil and lot referenced above on the date of analysis.

R.Time	Name	Area%
43.579	Isoledene	0.01
45.057	Unidentified	0.01
46.202	Junipene	0.24
46.799	trans-beta-Caryophyllene	0.25
47.573	trans-alpha-Bergamotene	0.03
48.742	trans-beta-Farnesene	0.02
49.036	alpha-Humulene	0.11
50.737	Unidentified	0.04
51.109	beta-Selinene	0.02
51.535	alpha-Selinene	0.01
51.768	beta-Himachalene	0.03
51.907	Unidentified	0.02
52.159	beta-Bisabolene	0.42
52.808	delta-Cadinene	0.02
54.088	trans-alpha-Bisabolene	0.05
56.621	Caryophyllene oxide	0.01
		100.00