

Sample Information

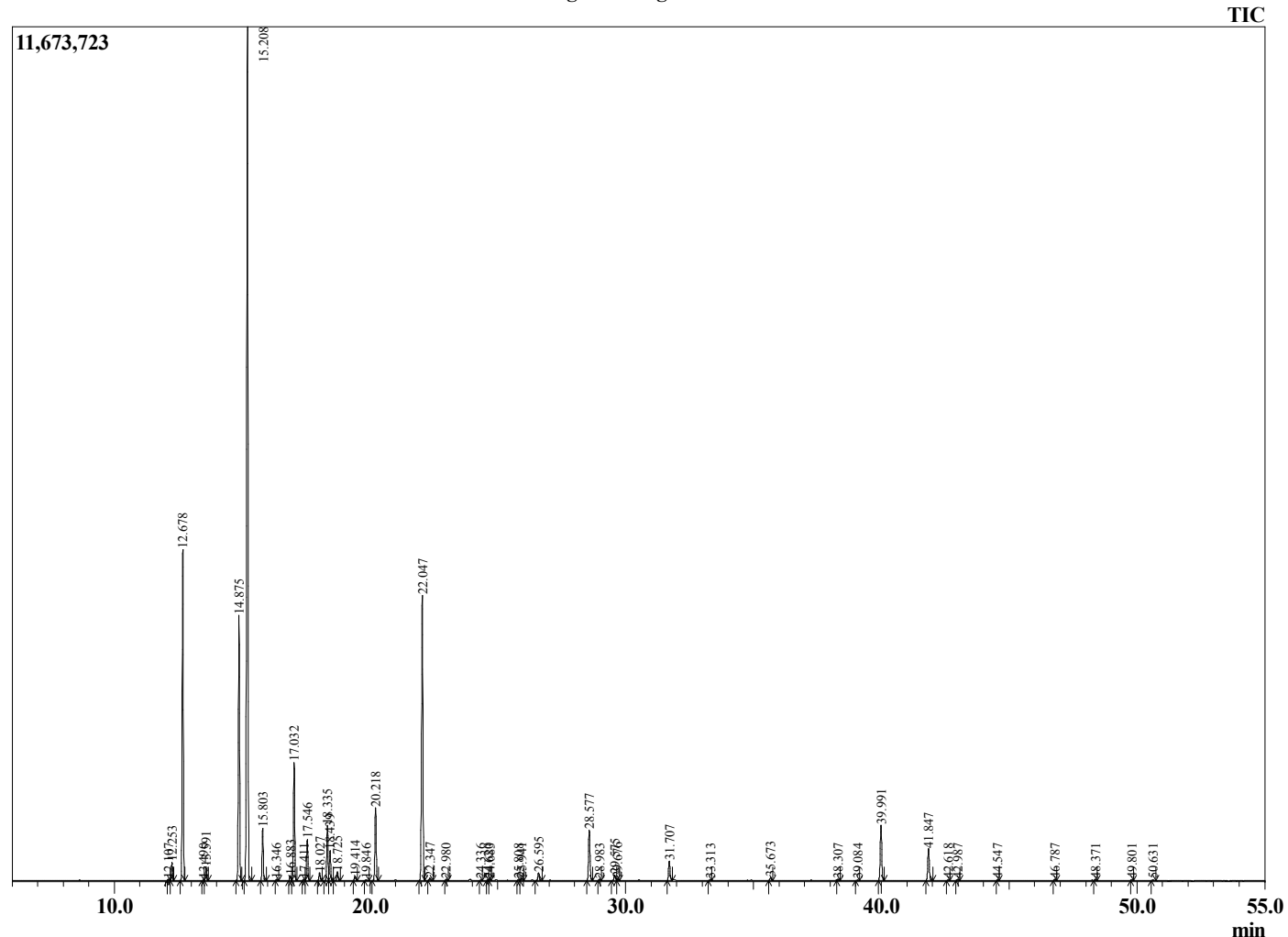
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 7/31/2019 10:05:05 PM
 Sample Type : Essential Oil
 Sample Name : Douglas Fir - Revive
 Sample ID : E0C0320D
 Injection Volume : 0.10
 Instrument ID: : GC-2



Peak Report TIC

R.Time	Name	Area%
12.107	Tricyclene	0.05
12.253	alpha-Thujene	0.65
12.678	alpha-Pinene	12.27
13.490	alpha-Fenchene	0.02
13.591	Camphene	0.50
14.875	Sabinene	10.45
15.208	beta-Pinene	36.58
15.803	Myrcene	2.05
16.346	Capronate <ethyl->	0.06
16.883	alpha-Phellandrene	0.20
17.032	3-Carene	4.82
17.411	1,4-Cineole	0.05
17.546	alpha-Terpinene	1.71
18.027	para-Cymene	0.33
18.335	Limonene	2.37
18.439	beta-Phellandrene	1.26
18.725	Z-beta-Ocimene	0.40
19.414	E-beta-Ocimene	0.20
19.846	cis-2,9,9-trimethyl-1,6-Dioxaspiro-nonane	0.04
20.218	gamma-Terpinene	3.18
22.047	Terpinolene	13.09
22.347	Dehydro-p-cymene	0.11
22.980	Linalool	0.05
24.336	endo-Fenchol	0.02
24.620	Methyl octanoate	0.03
24.683	trans-p-Menth-2-en-1-ol	0.04
25.808	trans-Pinocarveol	0.03
25.941	Douglas Fir unidentified	0.10
26.595	Citronellal	0.36
28.577	Terpinen-4-ol	2.47
28.983	p-Cymen-8-ol	0.05
29.575	alpha-Terpineol	0.27
29.676	Ethyl octanoate	0.09
31.707	Citronellol	0.98
33.313	Douglas Fir unidentified	0.05
35.673	Bornyl acetate	0.15
38.307	Methyl decanoate	0.06
39.084	delta-Elementene	0.03
39.991	Citronellyl acetate	2.85
41.847	Geranyl acetate	1.65
42.618	beta-Elementene	0.03
42.987	Ethyl decanoate	0.06
44.547	beta-Caryophyllene	0.03
46.787	alpha-Humulene	0.06
48.371	Germacrene D	0.06
49.801	E,E-alpha-Farnesene	0.05
50.631	delta-Cadinene	0.05
		100.00

Chromatogram Douglas Fir - Revive



Comments:

The analysis of this Douglas Fir batch sample meets the expected chemical profile for authentic essential oil of *Pseudotsuga menziesii*. 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.

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