

Sample Information

Analyzed by : Dr. Robert S. Pappas
 Analyzed : 9/26/2018 7:46:42 PM
 Sample Type : Essential Oil
 Sample Name : Douglas Fir - Edens Garden
 Sample ID : AH17II
 Injection Volume : 0.10
 Instrument ID : GC-3

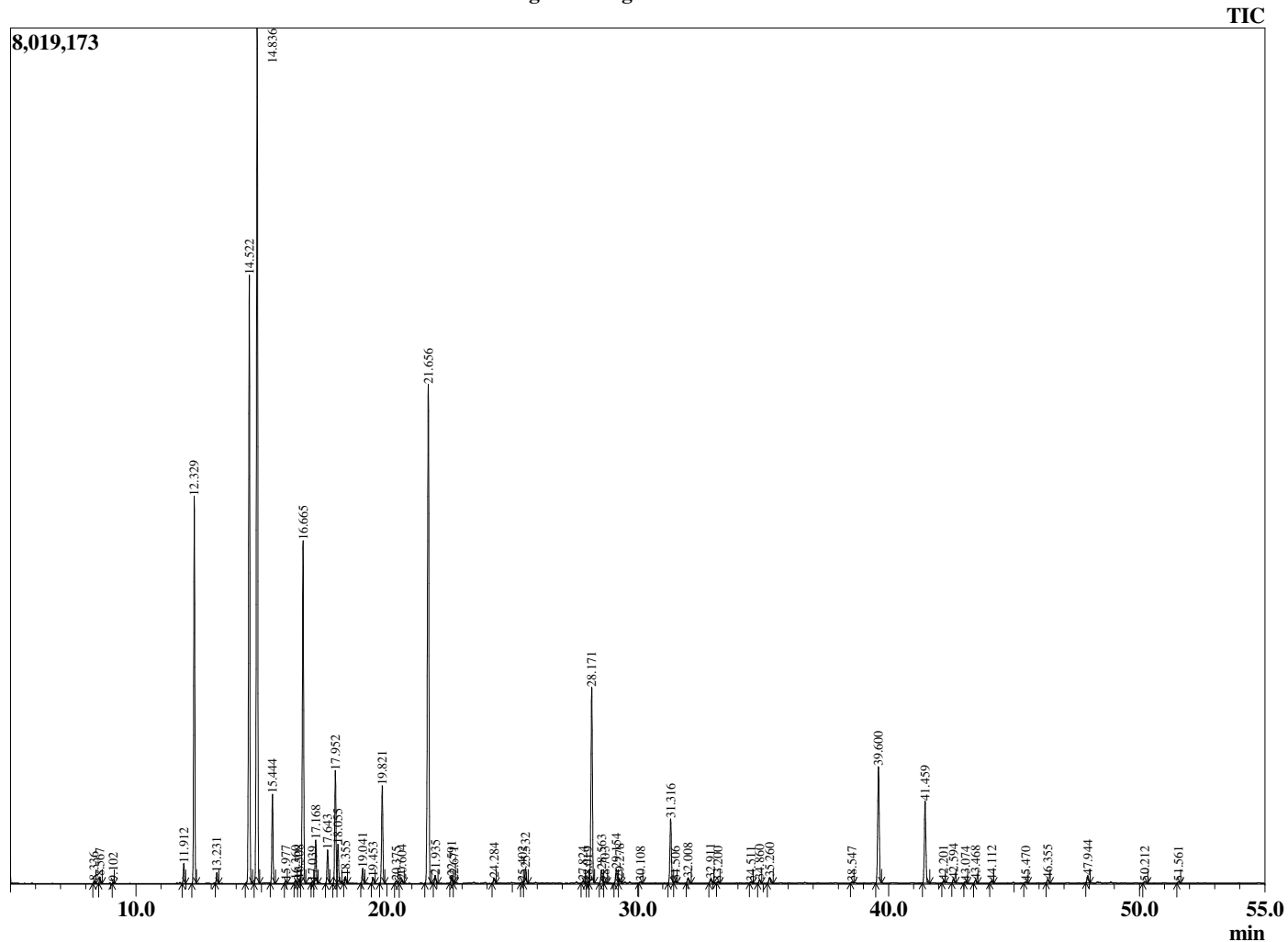


Peak Report TIC

R.Time	Name	Area%
8.336	Ethyl 2-methylbutyrate	0.05
8.567	Hex-3(Z)-enol	0.12
9.102	n-Hexanol	0.03
11.912	alpha-Thujene	0.44
12.329	alpha-Pinene	8.52
13.231	Camphene	0.25
14.522	Sabinene	15.12
14.836	beta-Pinene	22.21
15.444	Myrcene	2.16
15.977	Ethyl hexanoate	0.06
16.360	Hex-3(Z)-enyl acetate	0.07
16.508	alpha-Phellandrene	0.09
16.665	delta-3-Carene	8.81
17.039	1,4-Cineole	0.05
17.168	alpha-Terpinene	1.10
17.643	para-Cymene	0.87
17.952	Limonene	2.94
18.055	beta-Phellandrene	1.02
18.355	cis-beta-Ocimene	0.16
19.041	trans-beta-Ocimene	0.38
19.453	cis-2,2,9-trimethyl-1,6-Dioxaspiro[4.4]nonan	0.16
19.821	gamma-Terpinene	2.53
20.375	trans-2,2,9-trimethyl-1,6-Dioxaspiro[4.4]nona	0.06
20.604	trans-Sabinene hydrate	0.10
21.656	Terpinolene	14.69
21.935	para-Cymenene	0.21
22.591	Linalool	0.19
22.671	cis-Sabinene hydrate	0.05
24.284	cis-para-Menth-2-en-1-ol	0.16
25.402	trans-Pinocarveol	0.04
25.532	Unidentified	0.46
27.824	Unidentified	0.07
28.019	Unidentified	0.03
28.171	Terpinen-4-ol	5.89
28.563	para-Cymen-8-ol	0.40
28.703	Unidentified	0.05
29.154	alpha-Terpineol	0.46
29.278	Ethyl octanoate	0.12
30.108	cis-Piperitol	0.04
31.316	Citronellol	1.90
31.506	Thymol methyl ether	0.06
32.008	Unidentified	0.15
32.911	Geraniol	0.14
33.200	Unidentified	0.03
34.511	Citronellyl formate	0.04
34.860	Unidentified	0.10
35.260	Bornyl acetate	0.20
38.547	Unidentified	0.04
39.600	Citronellyl acetate	3.74
41.459	Geranyl acetate	2.50
42.201	beta-Elemene	0.07
42.594	Ethyl decanoate	0.13
43.074	alpha-Gurjunene	0.05
43.468	Junipene	0.09
44.112	beta-Caryophyllene	0.07
45.470	Unidentified	0.05
46.355	alpha-Humulene	0.12
47.944	Germacrene D	0.23
50.212	delta-Cadinene	0.07
51.561	alpha-Bisabolene	0.05
		100.00

This report is not valid after 1 year of the report date.

Chromatogram Douglas Fir - Edens Garden



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.