

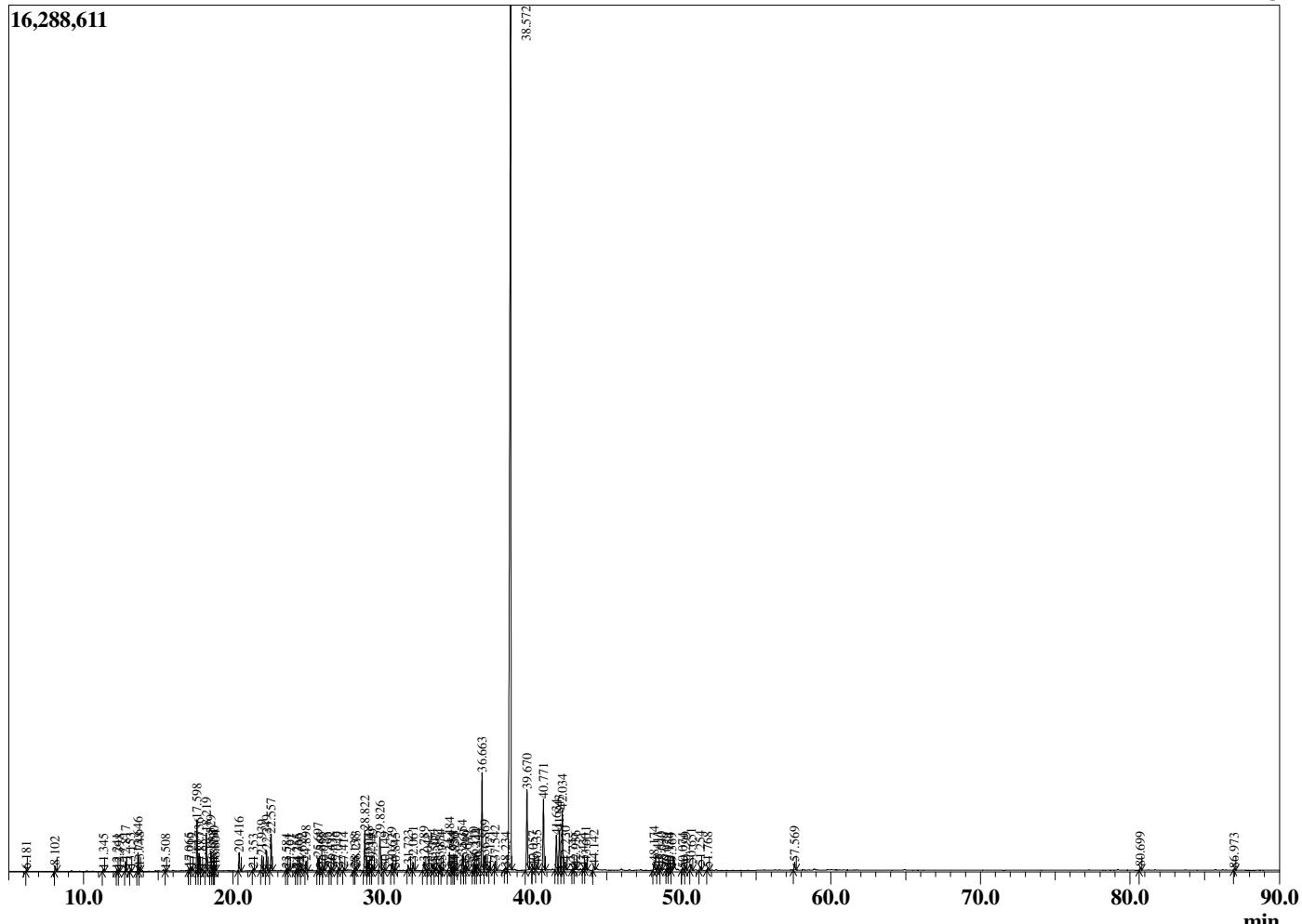
### Sample Information

Analyzed by : Dr. Robert S. Pappas  
 Analyzed : 3/17/2022 12:44:29 AM  
 Sample Type : Essential Oil  
 Sample Name : Giant Arborvitae oil- Revive  
 Sample ID : 1245  
 Injection Volume : 0.10  
 Instrument ID: : GC-3



### Peak Report TIC

R.Time	Name	Area%
6.181	Toluene	0.04
8.102	Furfural	0.19
11.345	ortho-Xylene	0.10
12.241	Cumene	0.06
12.398	Unidentified	0.05
12.817	alpha-Pinene	0.34
13.153	beta-Fenchene	0.11
13.646	alpha-Fenchene	0.63
13.748	Camphene	0.14
15.508	alpha-Methylstyrene	0.05
17.065	alpha-Phellandrene	0.09
17.219	delta-3-Carene	0.11
17.598	1,4-Cineole	1.91
17.736	alpha-Terpinene	0.63
17.887	meta-Cymene	0.07
18.219	para-Cymene	1.39
18.529	Limonene	0.74
18.638	beta-Phellandrene	0.19
18.730	1,8-Cineole	0.34
18.804	Unidentified	0.18
20.416	gamma-Terpinene	0.70
21.353	Pinol	0.07
21.939	para-Cymenene isomer	0.64
22.249	Terpinolene	0.80
22.557	para-Cymenene	1.46
23.584	Unidentified	0.07
23.761	Unidentified	0.06
24.255	cis-para-Menth-2-en-1-ol	0.10
24.366	Unidentified	0.05
24.622	trans-para-Menth-2-en-1-ol	0.11
24.898	alpha-Fenchol	0.40
25.697	Terpin-3-en-1-ol	0.55
25.865	Unidentified	0.14
26.058	trans-Pinocarveol	0.11
26.492	Camphor	0.16
26.638	trans-beta-Terpineol	0.14
27.049	Unidentified	0.13
27.414	trans-Pinocamphone	0.10
28.138	Unidentified	0.07
28.213	Borneol	0.16
28.822	Terpinen-4-ol	1.98
29.048	Unidentified	0.47
29.214	para-Cymen-8-ol	0.08
29.349	Terpineol isomer	0.25
29.826	alpha-Terpineol	1.91
30.149	gamma-Terpineol	0.11
30.629	cis-para-Menth-2-en-7-ol	0.30
30.845	Eucarvone	0.06
31.723	4-Isopropylphenol	0.23
32.061	Unidentified	0.34
32.789	Thymol methyl ether	0.45
33.042	Cuminaldehyde	0.06
33.354	Unidentified	0.33
33.507	Unidentified	0.09
33.834	cis-Myrtanol	0.26
33.974	Carvenone	0.12
34.484	trans-Myrtanol	0.89
34.654	Unidentified	0.15
34.758	Geranal	0.17
34.850	Santolina triene	0.08
35.354	Unidentified	0.68
35.460	Phellandral	0.20



### Comments:

The analysis of this Giant Arborvitae batch sample meets the expected chemical profile for authentic essential oil of *Thuja plicata*. 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.

R.Time	Name	Area%
35.649	Unidentified	0.18
36.110	Unidentified	0.37
36.222	Unidentified	0.23
36.344	Unidentified	0.31
36.663	Methyl myrtenate	4.38
36.869	Carvacrol	0.72
37.171	Unidentified	0.13
37.542	Unidentified	0.41
38.234	Unidentified	0.09
38.572	Methyl thujate	53.53
39.670	Unidentified	3.67
40.057	alpha-Terpinal acetate	0.11
40.335	Unidentified	0.18
40.771	Unidentified	3.27
41.634	Unidentified	1.60
41.843	Unidentified	1.87
42.034	Unidentified	2.90
42.230	Cuminic acid	0.54
42.745	Unidentified	0.06
42.936	Unidentified	0.12
43.434	Unidentified	0.08
43.601	Methyl trans-4-methylcinnamate	0.32
44.142	alpha-Gurjunene	0.22
48.174	Unidentified	0.37
48.411	Unidentified	0.13
48.640	Ar-Curcumene	0.13
49.029	delta-Selinene	0.05
49.154	beta-Selinene	0.06
49.369	Valencene	0.05
50.074	(E,E)-alpha-Farnesene	0.08
50.299	beta-Bisabolene	0.12
50.651	Nootkatene	0.28
51.254	beta-Sesquiphellandrene	0.19
51.768	Selina-4(15),7(11)-diene	0.11
57.569	gamma-Eudesmol	0.37
80.699	Abietadiene	0.14
86.973	Unidentified	0.06
		100.00