

Sample Information

Analyzed by : Dr. Robert S. Pappas  
 Analyzed : 9/17/2018 4:18:10 PM  
 Sample Type : Essential Oil  
 Sample Name : Elemi Oil, Philippines  
 Sample ID : Barefut-0104  
 Injection Volume : 0.10  
 Instrument ID : GC-2

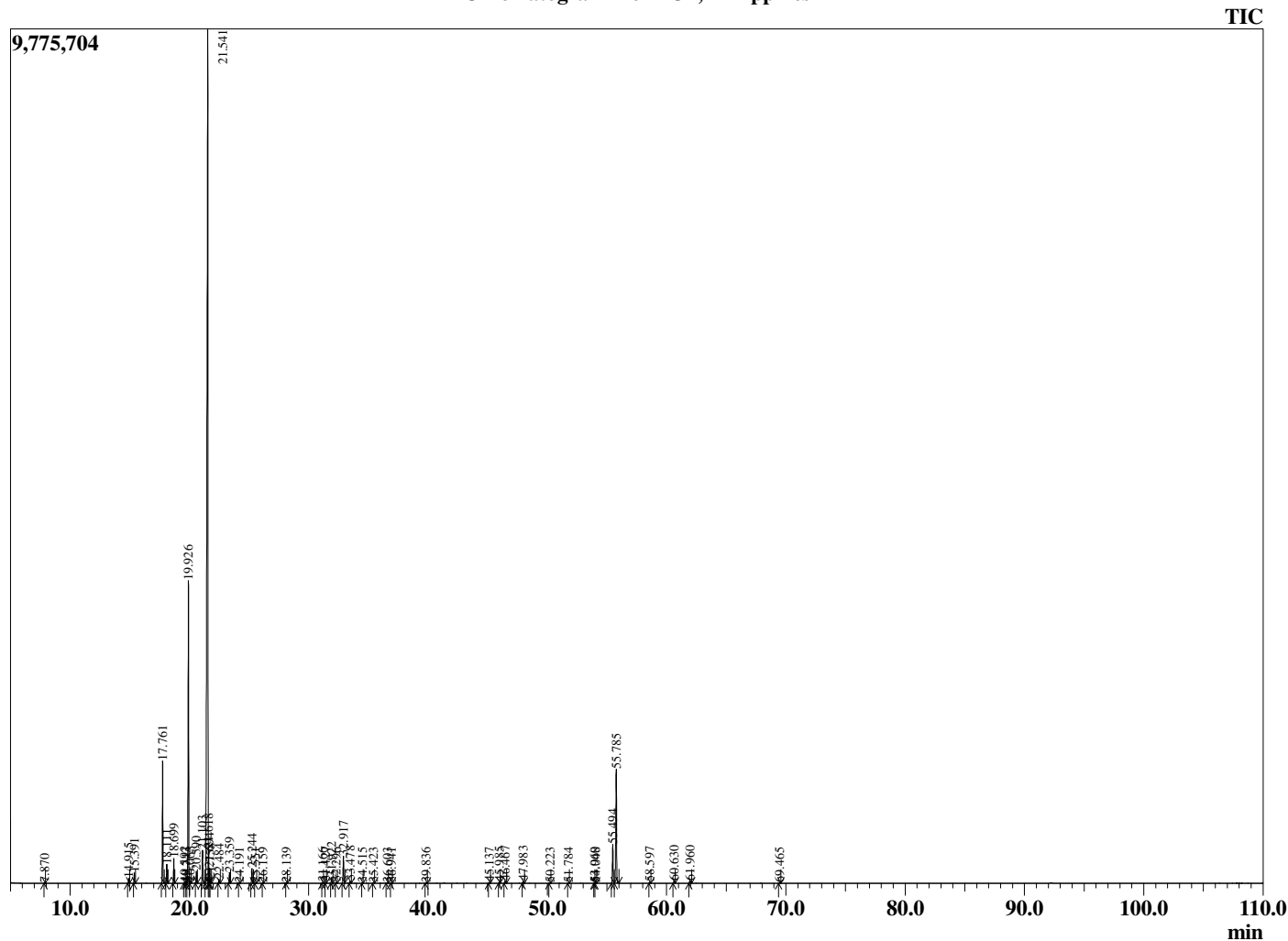


Peak Report TIC

R.Time	Name	Area%
7.870	Toluene	0.01
14.915	alpha-Thujene	0.19
15.391	alpha-Pinene	0.41
17.761	Sabinene	5.06
18.111	beta-Pinene	0.79
18.699	Myrcene	1.05
19.592	Octanal	0.05
19.743	Pseudolimonene	0.03
19.926	alpha-Phellandrene	14.00
20.063	3-Carene	0.06
20.590	alpha-Terpinene	0.54
21.103	p-Cymene	1.70
21.541	Limonene	61.25
21.618	beta-Phellandrene	1.17
21.694	1,8-Cineole	0.61
21.758	Z-beta-Ocimene	0.13
22.484	E-beta-Ocimene	0.18
23.359	gamma-Terpinene	0.49
24.191	trans-Sabinene hydrate	0.03
25.244	Terpinolene	0.67
25.551	Dehydro-p-cymene	0.02
26.159	Linalool	0.01
28.139	allo-Ocimene	0.01
31.166	Elemi unidentified	0.04
31.427	Elemi unidentified	0.05
31.922	Terpinen-4-ol	0.29
32.296	p-Cymen-8-ol	0.04
32.917	alpha-Terpineol	1.35
33.478	alpha-Phellandrene epoxide	0.10
34.515	trans-Carveol	0.02
35.423	cis-Carveol	0.02
36.603	Carvotanacetone	0.03
36.941	Piperitone	0.02
39.836	Carvacrol	0.03
45.137	alpha-Copaene	0.04
45.985	beta-Elemene	0.05
46.467	Methyleugenol	0.10
47.983	beta-Caryophyllene	0.12
50.223	alpha-Humulene	0.04
51.784	Germacrene D	0.03
53.960	delta-Cadinene	0.02
54.048	Elemol isomer	0.04
55.494	Elemicin	2.06
55.785	alpha-Elemol	6.63
58.597	Guaiol	0.08
60.630	gamma-Eudesmol	0.13
61.960	alpha-Eudesmol	0.17
69.465	alpha-Phellandrene dimer	0.04
		100.00

This report is valid for 1 year from the analyzed date.

Chromatogram Elemi Oil, Philippines



Comments:

The analysis of this Elemi Oil, Philippines batch sample meets the expected chemical profile for authentic essential oil of *Canarium luzonicum*. No contamination or adulteration was detected.