

Sample Information

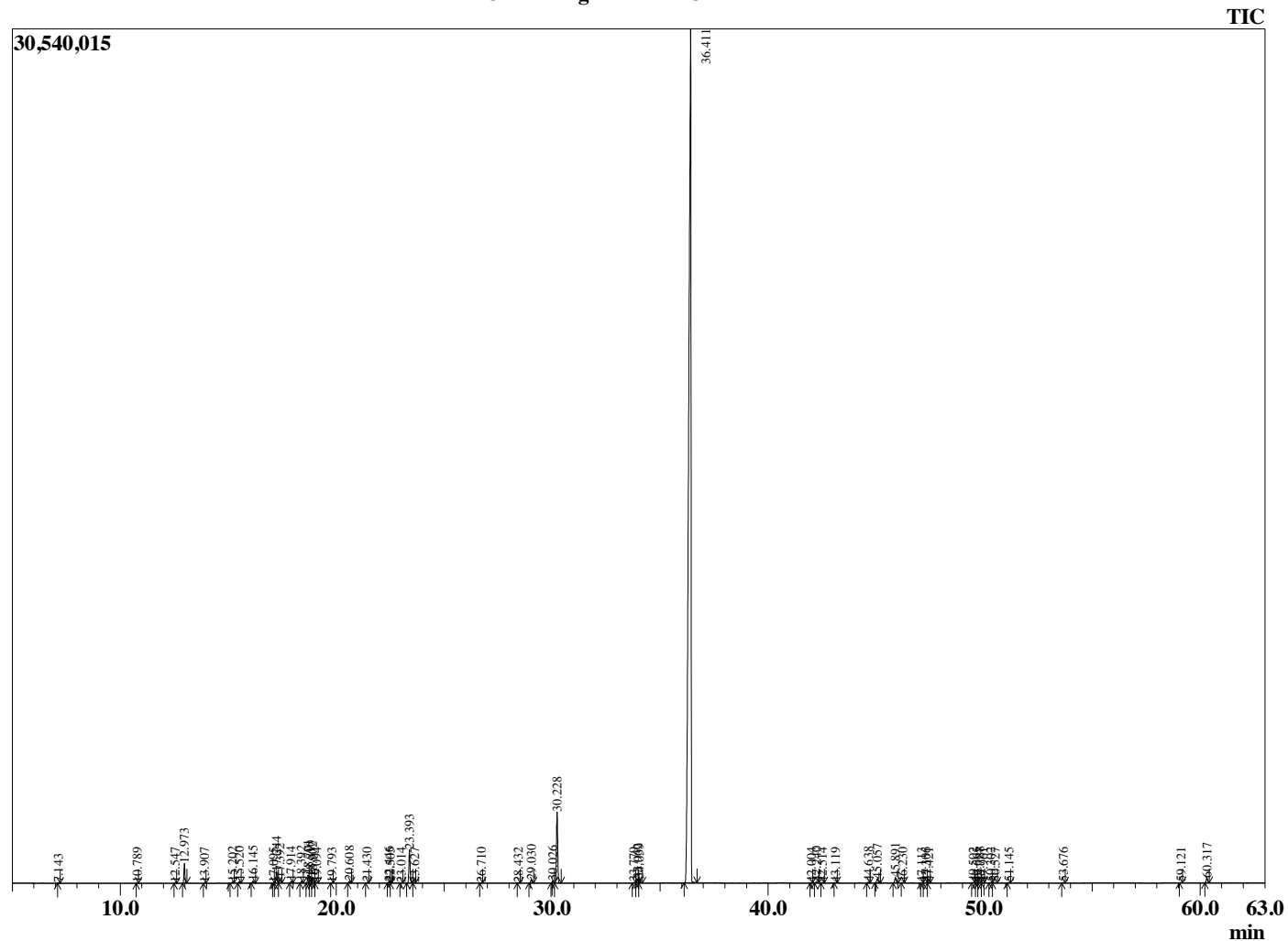
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 12/12/2020 2:50:35 PM
 Sample Type : Essential Oil
 Sample Name : Anise Oil-Barefut
 Sample ID : 0104
 Injection Volume : 0.10
 Instrument ID: : GC-3



Peak Report TIC

R.Time	Name	Area%
4.229	3-Methylbutanal	0.01
7.143	Hexanal	0.01
10.789	Styrene	0.01
12.547	alpha-Thujene	0.02
12.973	alpha-Pinene	0.92
13.907	Camphene	0.02
15.202	Sabinene	0.06
15.520	beta-Pinene	0.07
16.145	Myrcene	0.10
17.095	Unidentified	0.00
17.244	alpha-Phellandrene	0.57
17.392	delta-3-Carene	0.23
17.914	alpha-Terpinene	0.07
18.392	para-Cymene	0.09
18.701	Limonene	0.40
18.810	beta-Phellandrene	0.34
18.902	1,8-Cineole	0.28
19.094	(Z)-beta-Ocimene	0.02
19.793	(E)-beta-Ocimene	0.01
20.608	gamma-Terpinene	0.09
21.430	cis-Linalool oxide (furanoid)	0.03
22.446	Terpinolene	0.07
22.505	trans-Linalool oxide (furanoid)	0.01
23.014	Unidentified	0.01
23.393	Linalool	1.79
23.627	Unidentified	0.01
26.710	Unidentified	0.01
28.432	Borneol	0.01
29.030	Terpinen-4-ol	0.18
30.026	alpha-Terpineol	0.12
30.228	Methyl chavicol	4.03
33.779	Geraniol	0.03
33.962	(Z)-Anethole	0.22
34.039	para-Anisaldehyde	0.23
36.411	(E)-Anethole	88.60
42.004	Unidentified	0.01
42.240	alpha-Copaene	0.07
42.514	Unidentified	0.01
43.119	beta-Elemene	0.01
44.638	cis-alpha-Bergamotene	0.04
45.057	trans-beta-Caryophyllene	0.26
45.891	trans-alpha-Bergamotene	0.32
46.230	Aromadendrene	0.02
47.113	(E)-beta-Farnesene	0.02
47.306	alpha-Humulene	0.02
47.421	Unidentified	0.02
49.502	Unidentified	0.02
49.665	Unidentified	0.01
49.788	Bicyclogermacrene	0.05
49.961	Unidentified	0.01
50.302	(E,E)-alpha-Farnesene	0.03
50.527	beta-Bisabolene	0.04
51.145	delta-Cadinene	0.03
53.676	trans-Nerolidol	0.02
59.121	alpha-Cadinol	0.02
60.317	Foeniculin	0.29
		100.00

Chromatogram Anise Oil-Barefut



Comments:

The analysis of this Anise batch sample meets the expected chemical profile for authentic essential oil of *Illicium verum*. 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.