

Sample Information

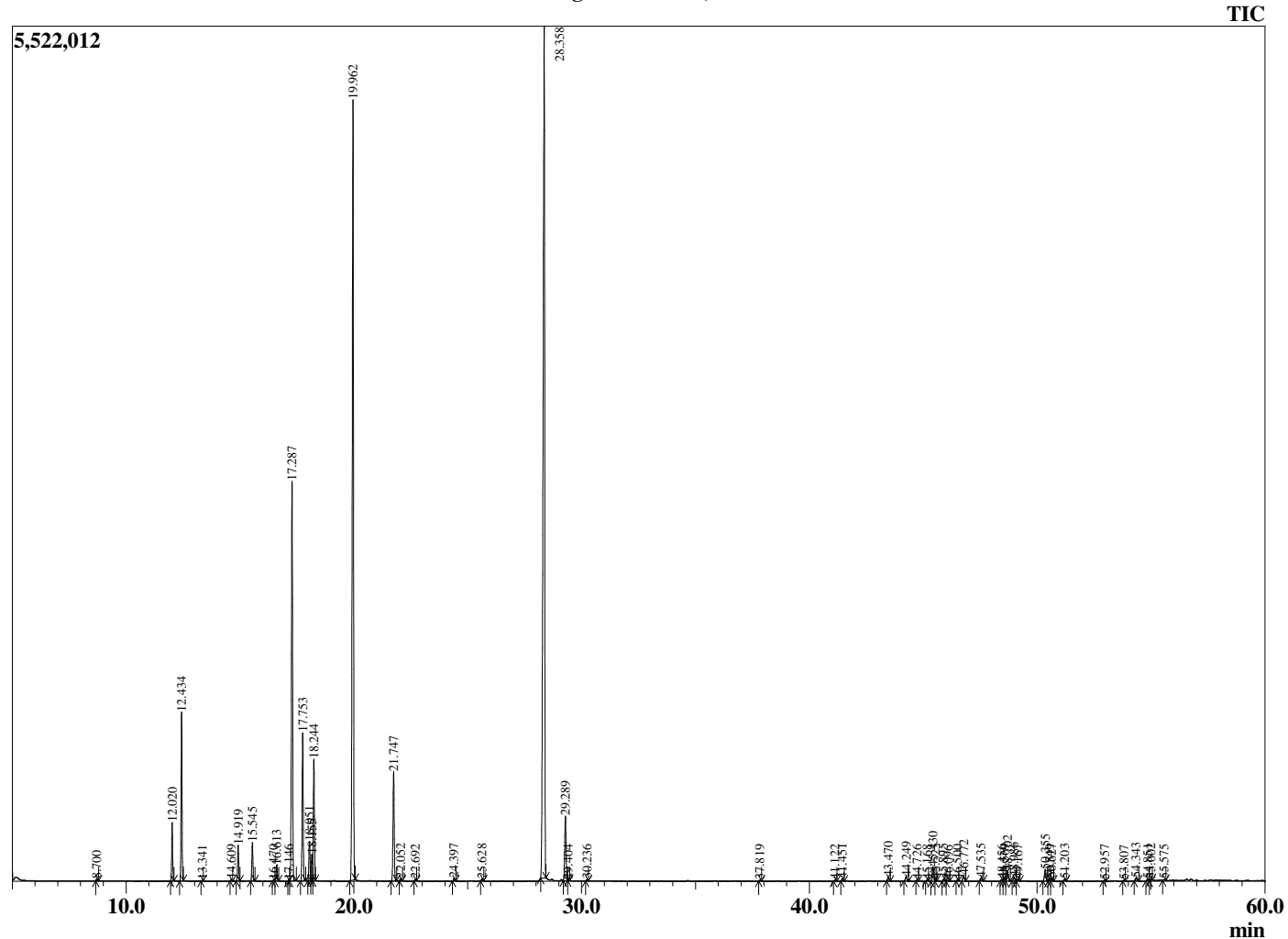
Analyzed by : Dr. Robert S. Pappas  
 Analyzed : 10/25/2018 4:33:44 PM  
 Sample Type : Essential Oil  
 Sample Name : Tea Tree, Australia  
 Sample ID : P170421AR  
 Injection Volume : 0.10  
 Instrument ID : GC-3



Peak Report TIC

R.Time	Name	Area%
8.700	3-cis-Hexenol	0.04
12.020	alpha-Thujene	1.43
12.434	alpha-Pinene	4.14
13.341	Camphene	0.02
14.609	Sabinene	0.04
14.919	beta-Pinene	0.98
15.545	Myrcene	1.03
16.470	Unidentified	0.02
16.613	alpha-Phellandrene	0.45
17.146	1,4-Cineole	0.03
17.287	alpha-Terpinene	11.82
17.753	para-Cymene	4.20
18.051	Limonene	1.18
18.155	beta-Phellandrene	0.79
18.244	1,8-Cineole	3.51
19.962	gamma-Terpinene	25.44
21.747	Terpinolene	3.44
22.052	para-Cymenene	0.07
22.692	Linalool	0.04
24.397	cis-para-Menth-2-en-1-ol	0.09
25.628	trans-para-Menth-2-en-1-ol	0.07
28.358	Terpinen-4-ol	35.46
29.289	alpha-Terpineol	2.23
29.404	cis-Piperitol	0.03
30.236	trans-Piperitol	0.04
37.819	Unidentified	0.03
41.122	Isoledene	0.03
41.451	alpha-Copaene	0.08
43.470	alpha-Gurjunene	0.16
44.249	beta-Caryophyllene	0.17
44.726	beta-Copaene	0.03
45.168	Unidentified	0.03
45.430	Aromadendrene	0.56
45.525	Aromadendrene isomer	0.05
45.895	alpha-Guaiene	0.07
46.096	cis-Murrola-3,5-diene	0.03
46.500	alpha-Humulene	0.03
46.772	Alloaromadendrene	0.24
47.535	cis-Murrola-4(14),5-diene	0.12
48.456	delta-Selinene	0.07
48.569	beta-Selinene	0.09
48.702	Viridiflorene	0.42
48.986	Bicyclogermacrene	0.15
49.167	alpha-Murolene	0.06
50.355	delta-Cadinene	0.43
50.549	trans-Calamenene	0.07
50.627	Zonarene	0.11
51.203	trans-Cadina-1,4-diene	0.07
52.957	Sesquiterpenol	0.03
53.807	Spathulenol	0.02
54.343	Globulol	0.12
54.851	Viridiflorol	0.06
55.002	Guaiol	0.04
55.575	Eudesm-5-en-11-ol	0.03
		100.00

Chromatogram Tea Tree, Australia



Comments:

The analysis of this Tea Tree, Australia batch sample meets the expected chemical profile for authentic essential oil of *Melaleuca alternifolia*. 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.