

Sample Information

Analyzed by : Dr. Robert S. Pappas  
 Analyzed : 7/20/2019 8:45:38 AM  
 Sample Type : Essential Oil  
 Sample Name : Citronella - Barefut  
 Sample ID : 0103  
 Injection Volume : 0.10  
 Instrument ID : GC-3

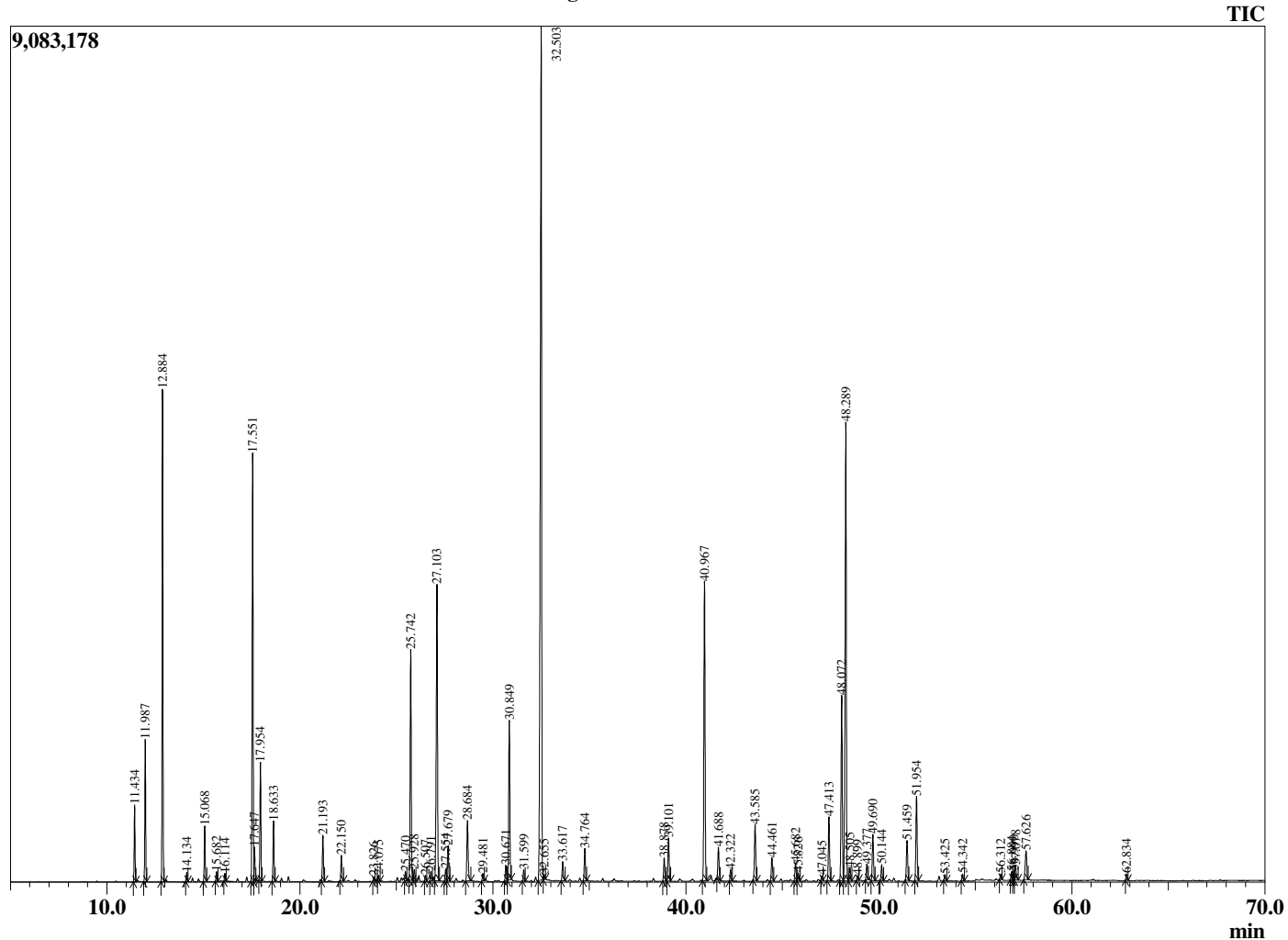


Peak Report TIC

R.Time	Name	Area%
11.434	Tricyclene	1.16
11.987	alpha-Pinene	2.16
12.884	Camphene	7.67
14.134	Sabinene	0.14
15.068	Myrcene	0.91
15.682	2-Carene	0.16
16.114	alpha-Phellandrene	0.13
17.551	Limonene	7.75
17.647	beta-Phellandrene	0.57
17.954	cis-beta-Ocimene	2.08
18.633	trans-beta-Ocimene	1.07
21.193	Terpinolene	0.85
22.150	Linalool	0.49
23.826	cis-para-Menth-2-en-1-ol	0.09
24.075	allo-Ocimene	0.10
25.470	Neoisopulegol	0.17
25.742	Citronellal	4.54
25.928	trans-beta-Terpineol	0.23
26.507	Isoborneol	0.11
26.791	Unidentified	0.18
27.103	Borneol	6.66
27.554	Unidentified	0.25
27.679	Terpinen-4-ol	0.74
28.684	alpha-Terpineol	1.39
29.481	Decanal	0.15
30.671	Nerol	0.30
30.849	Citronellol	3.30
31.599	Neral	0.23
32.503	Geraniol	20.91
32.655	Piperitone	0.12
33.617	Geranial	0.40
34.764	Bornyl acetate	0.69
38.878	alpha-Terpinyl acetate	0.51
39.101	Citronellyl acetate	0.92
40.967	Geranyl acetate	6.52
41.688	beta-Elementene	0.70
42.322	Methyleugenol	0.23
43.585	beta-Caryophyllene	1.27
44.461	trans-alpha-Bergamotene	0.53
45.682	cis-Methyl isoeugenol	0.44
45.826	alpha-Humulene	0.19
47.045	trans-Cadina-1(6),4-diene	0.09
47.413	Germacrene D	1.42
48.072	(Z,Z)-alpha-Farnesene	4.27
48.289	trans-Methyl isoeugenol	10.25
48.505	alpha-Muuroleone	0.30
48.899	(E,E)-alpha-Farnesene	0.09
49.377	gamma-Cadinene	0.32
49.690	delta-Cadinene	1.04
50.144	Citronellyl butyrate	0.34
51.459	Elemol	0.92
51.954	Geranyl butyrate	1.87
53.425	Caryophyllene oxide	0.13
54.342	Unidentified	0.14
56.312	gamma-Eudesmol	0.11
56.884	alpha-Muurolol (=Torreyol)	0.17
56.990	epi-alpha-Cadinol	0.23
57.078	Unidentified	0.38
57.626	alpha-Cadinol	0.80
62.834	Geranyl hexanoate	0.13
		100.00

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

Chromatogram Citronella - Barefut



Comments:

The analysis of this Citronella batch sample meets the expected chemical profile for authentic essential oil of *Cymbopogon nardus*. No contamination or adulteration was detected.