

Sample Information

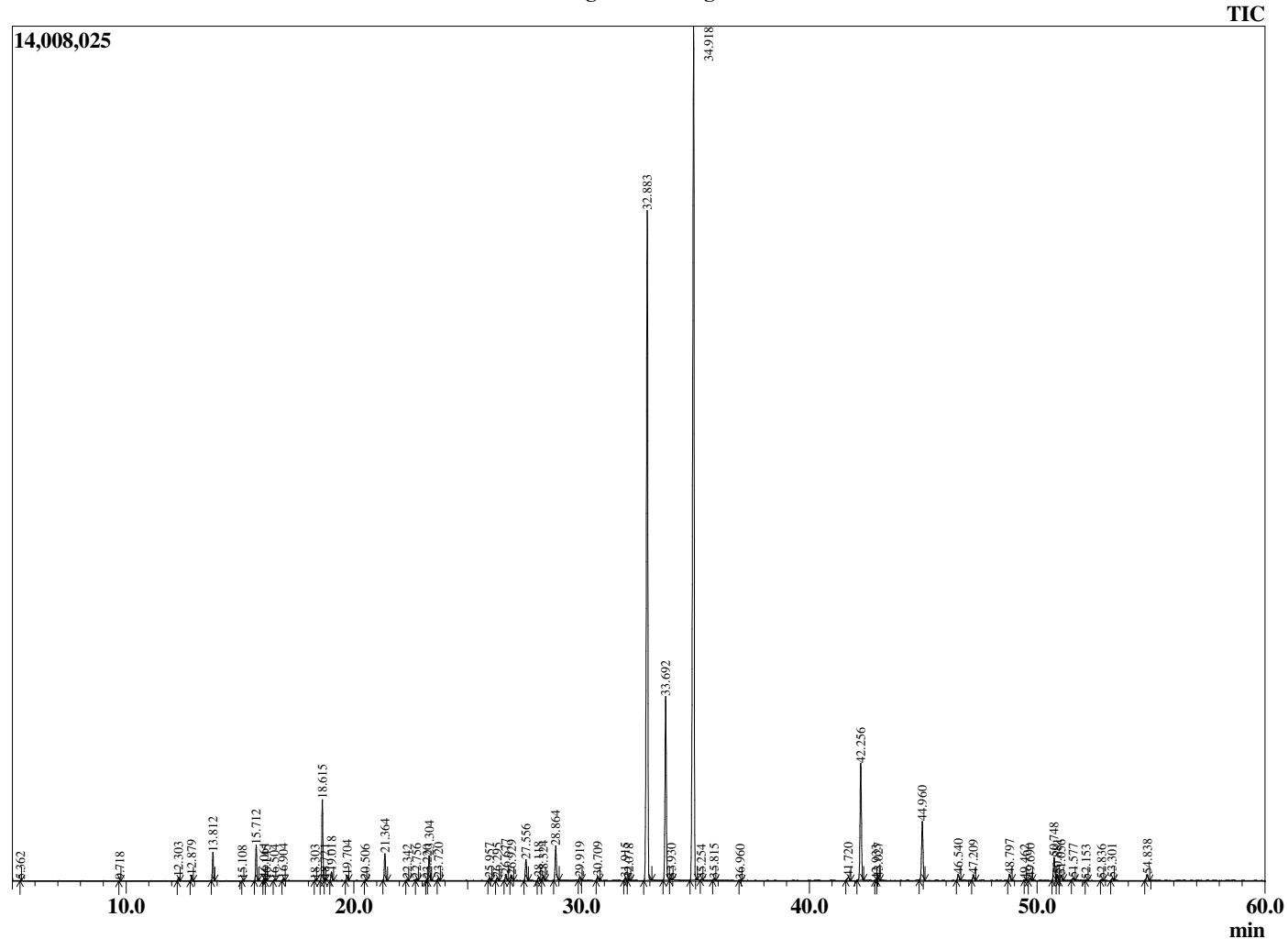
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 1/5/2019 11:08:25 AM
 Sample Type : Essential Oil
 Sample Name : Lemongrass Oil
 Sample ID : B0319G
 Injection Volume : 0.10
 Instrument ID : GC-3



Peak Report TIC

R.Time	Name	Area%
5.362	1-Pentanol	0.01
9.718	4-Heptanone	0.01
12.303	Tricyclene	0.11
12.879	alpha-Pinene	0.17
13.812	Camphene	0.89
15.108	Sabinene	0.01
15.712	6-Methyl hept-5-en-2-one	1.16
16.061	Myrcene	0.08
16.145	dehydro-1,8-Cineole	0.02
16.504	trans-Dehydroxylinalool oxide	0.03
16.904	Octanal	0.07
18.303	para-Cymene	0.02
18.615	Limonene	2.84
18.721	beta-Phellandrene	0.03
19.018	cis-beta-Ocimene	0.31
19.704	trans-beta-Ocimene	0.18
20.506	gamma-Terpinene	0.02
21.364	4-Nonanone	1.01
22.342	Terpinolene	0.04
22.756	Rosefuran	0.07
23.220	Perillene	0.03
23.304	Linalool	0.93
23.720	alpha-Pinene oxide	0.08
25.957	Epiphocitral A	0.11
26.295	exo-Isocitral	0.10
26.677	trans-Chrysanthemal	0.24
26.929	Citronellal	0.21
27.556	cis-Chrysanthenol	0.83
28.118	Isoborneol	0.14
28.324	Borneol	0.17
28.864	trans-Isocitral	1.44
29.919	alpha-Terpineol	0.11
30.709	Decanal	0.16
31.915	Nerol	0.09
32.078	Citronellol	0.06
32.883	Neral	29.58
33.692	Geraniol	7.72
33.930	Piperitone	0.07
34.918	Geranial	39.69
35.254	4-Undecanone	0.02
35.815	trans-Carvone oxide	0.07
36.960	Geranyl formate	0.02
41.720	Cyclosativene	0.20
42.256	Geranyl acetate	5.05
42.933	beta-Cubebene	0.03
43.027	beta-Elemene	0.10
44.960	beta-Caryophyllene	2.69
46.540	trans-Isoeugenol	0.25
47.209	alpha-Humulene	0.25
48.797	Germacrene D	0.26
49.462	trans-Muurolo-4(14),5-diene	0.02
49.690	epi-Cubebol	0.11
50.748	gamma-Cadinene	1.04
50.881	Cubebol	0.25
51.056	delta-Cadinene	0.25
51.577	trans-gamma-Bisabolene	0.09
52.153	alpha-Cadinene	0.02
52.836	Elemol	0.03
53.301	Geranyl butyrate	0.09
54.838	Caryophyllene oxide	0.29
		100.00

Chromatogram Lemongrass Oil



Comments:

The analysis of this Lemongrass batch sample meets the expected chemical profile for authentic essential oil of *Cymbopogon flexuosus*. 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.