

Sample Information

Analyzed by : Dr. Robert S. Pappas
 Analyzed : 1/24/2019 1:17:27 AM
 Sample Type : Essential Oil
 Sample Name : Clove - Barefut
 Sample ID : 0108
 Injection Volume : 0.10
 Instrument ID : GC-4

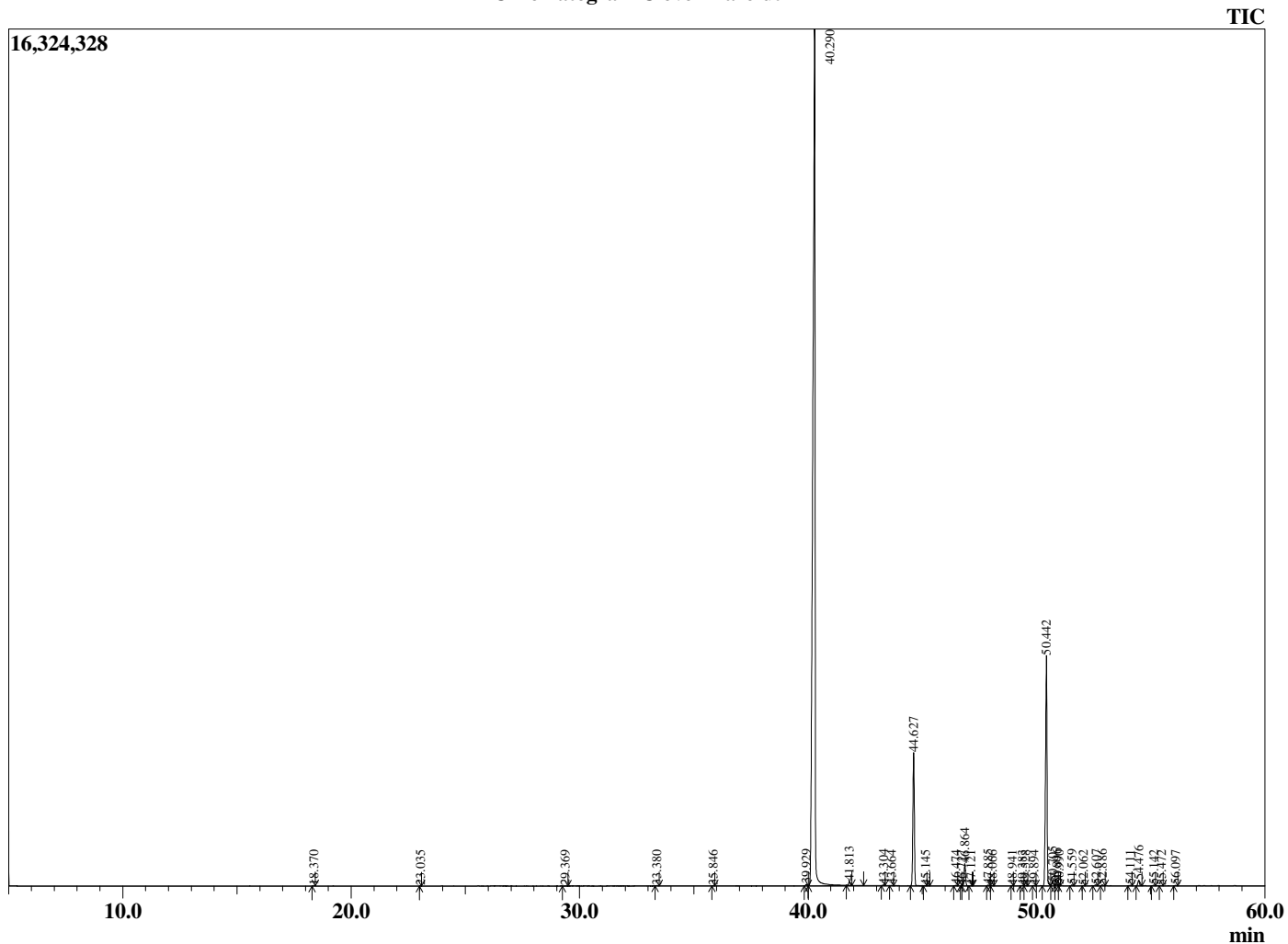


Peak Report TIC

R.Time	Name	Area%
18.370	Limonene	0.01
23.035	Linalool	0.01
29.369	Methyl salicylate	0.01
33.380	Chavicol	0.03
35.846	(Z)-Anethole	0.01
39.929	alpha-Cubebene	0.09
40.290	Eugenol	75.58
41.813	alpha-Copaene	0.23
43.304	Methyleugenol	0.04
43.664	Unidentified	0.02
44.627	beta-Caryophyllene	7.84
45.145	Unidentified	0.02
46.474	Humulen-(v1)	0.02
46.727	Unidentified	0.01
46.864	alpha-Humulene	1.29
47.121	Alloaromadendrene	0.01
47.885	10-beta-H-Cadina-1(6),4-diene	0.05
48.066	trans-Cadina-1(6),4-diene	0.02
48.941	beta-Selinene	0.01
49.383	alpha-Selinene	0.02
49.528	alpha-Murolene	0.02
49.894	(E,E)-alpha-Farnesene	0.02
50.442	Eugenyl acetate	13.62
50.705	delta-Cadinene	0.25
50.896	cis-Calamenene	0.11
50.990	Unidentified	0.03
51.559	trans-Cadine-1,4-diene	0.04
52.062	alpha-Calacorene	0.01
52.607	Unidentified	0.06
52.886	Unidentified	0.06
54.111	Caryophyllene alcohol	0.04
54.476	Caryophyllene oxide	0.34
55.142	Unidentified	0.04
55.472	Unidentified	0.02
56.097	Humulene epoxide II	0.02
		100.00

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

Chromatogram Clove - Barefut



Comments:

The analysis of this Clove Bud batch sample meets the expected chemical profile for authentic essential oil of *Eugenia caryophyllata*. No contamination or adulteration was detected.