

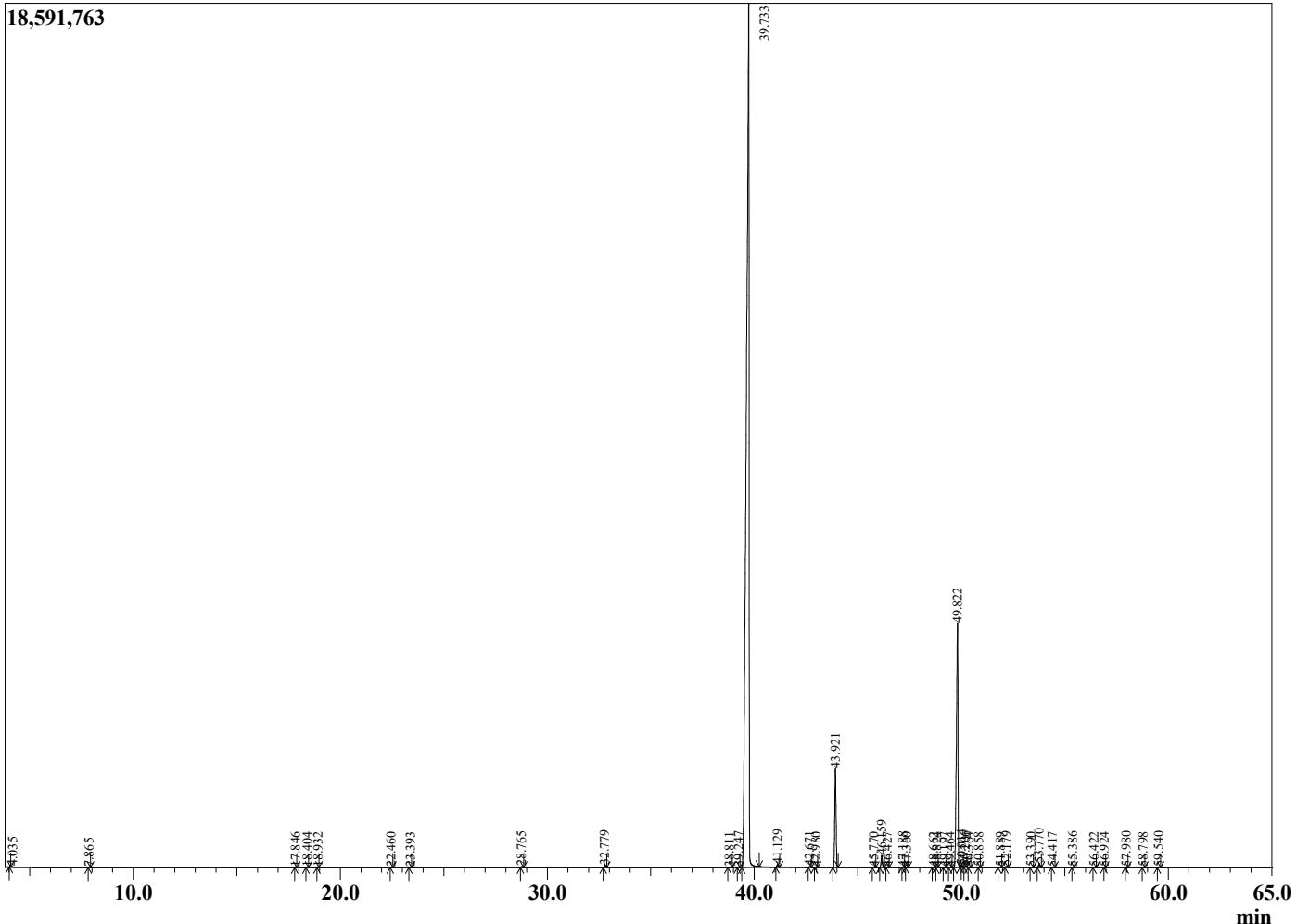
### Sample Information

Analyzed by : Dr. Robert S. Pappas  
 Analyzed : 10/21/2022 2:55:45 AM  
 Sample Type : Essential Oil  
 Sample Name : Clove Oil - Barefut  
 Sample ID : 0115  
 Injection Volume : 0.10  
 Instrument ID: : GC-4



### Peak Report TIC

R.Time	Name	Area%
4.035	3-Methylbutanal	0.01
7.865	Furfural	0.01
17.846	Limonene	0.01
18.404	2-Heptyl acetate	0.01
18.932	trans-beta-Ocimene	0.00
22.460	Linalool	0.01
23.393	trans-4,8-Dimethylnona-1,3,7-triene	0.01
28.765	Methyl salicylate	0.04
32.779	Chavicol	0.08
38.811	Unidentified	0.01
39.247	alpha-Cubebene	0.03
39.733	Eugenol	80.64
41.129	alpha-Copaene	0.12
42.671	Methyleugenol	0.03
42.980	cis-beta-Caryophyllene	0.01
43.921	trans-beta-Caryophyllene	4.50
45.770	Unidentified	0.01
46.159	alpha-Humulene	0.55
46.427	Alloromadendrene	0.01
47.188	cis-Cadina-1(6),4-diene	0.02
47.360	trans-Cadina-1(6),4-diene	0.01
48.662	alpha-Selinene	0.01
48.824	alpha-Murolene	0.01
49.197	trans,trans-alpha-Farnesene	0.01
49.464	Unidentified	0.01
49.822	Eugenyl acetate	13.33
50.014	delta-Cadinene	0.12
50.206	trans-Calamenene	0.04
50.364	Unidentified	0.01
50.858	trans-Cadina-1,4-diene	0.01
51.889	Unidentified	0.01
52.179	Unidentified	0.04
53.390	Caryophyllene alcohol	0.01
53.770	Caryophyllene oxide	0.18
54.417	Unidentified	0.01
55.386	Humulene epoxide II	0.01
56.422	Epicubenol	0.01
56.924	Unidentified	0.01
57.980	Unidentified	0.02
58.798	Unidentified	0.01
59.540	Unidentified	0.03
		100.00



### 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. The results provided in this GCMS quality analysis reflect the chemical composition of the oil and lot referenced above on the date of analysis.