

### Sample Information

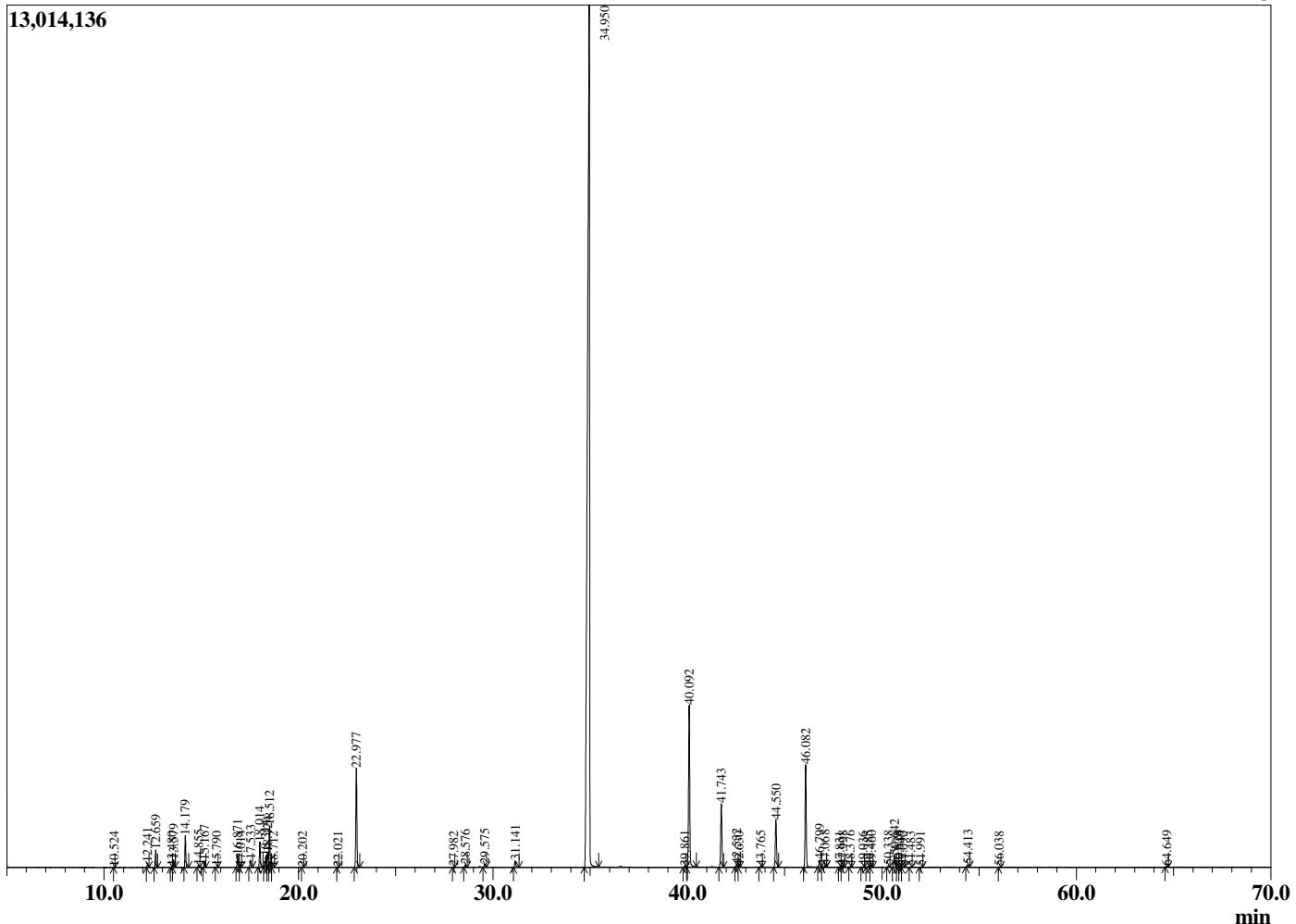
Analyzed by : Dr. Robert S. Pappas  
 Analyzed : 3/27/2019 7:38:24 PM  
 Sample Type : Essential Oil  
 Sample Name : Cinnamon Bark - Barefut  
 Sample ID : 0107  
 Injection Volume : 0.10  
 Instrument ID: GC-3

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



### Peak Report TIC

R.Time	Name	Area%
10.524	Styrene	0.01
12.241	alpha-Thujene	0.14
12.659	alpha-Pinene	0.57
13.480	alpha-Fenchene	0.03
13.579	Camphepane	0.27
14.179	Benzaldehyde	1.10
14.855	Sabinene	0.08
15.167	beta-Pinene	0.23
15.790	Myrcene	0.03
16.871	alpha-Phellandrene	0.45
17.014	delta-3-Carene	0.04
17.533	alpha-Terpinene	0.29
18.014	para-Cymene	0.97
18.314	Limonene	0.45
18.424	beta-Phellandrene	0.56
18.512	1,8-Cineole	1.58
18.712	cis-beta-Ocimene	0.02
20.202	gamma-Terpinene	0.01
22.021	Terpinolene	0.02
22.977	Linalool	4.08
27.982	Borneol	0.02
28.576	Terpinen-4-ol	0.12
29.575	alpha-Terpineol	0.13
31.141	(Z)-Cinnamaldehyde	0.31
34.950	(E)-Cinnamaldehyde	69.22
39.861	alpha-Cubebene	0.06
40.092	Eugenol	7.43
41.743	alpha-Copaene	2.98
42.532	beta-Cubebene	0.14
42.630	beta-Elemene	0.02
43.765	alpha-Gurjunene	0.05
44.550	beta-Caryophyllene	2.25
46.082	(E)-Cinnamyl acetate	4.64
46.799	alpha-Humulene	0.33
47.068	Alloaromadendrene	0.08
47.831	10-beta-H-Cadina-1(6),4-diene	0.02
47.998	trans-Cadina-1(6),4-diene	0.08
48.376	Germacrene D	0.04
49.036	Unidentified	0.03
49.285	Unidentified	0.05
49.460	alpha-Murolene	0.05
50.338	Eugenyl acetate	0.06
50.642	delta-Cadinene	0.57
50.828	cis-Calamenene	0.04
50.919	Zonarene	0.04
51.090	ortho-Methoxycinnamaldehyde	0.04
51.483	trans-Cadine-1,4-diene	0.02
51.991	alpha-Calacorene	0.03
54.413	Caryophyllene oxide	0.13
56.038	Humulene epoxide II	0.02
64.649	Benzyl benzoate	0.04



### Comments:

The analysis of this Cinnamon Bark, Ceylon batch sample meets the expected chemical profile for authentic essential oil of *Cinnamomum zeylanicum*. No contamination or adulteration was detected.