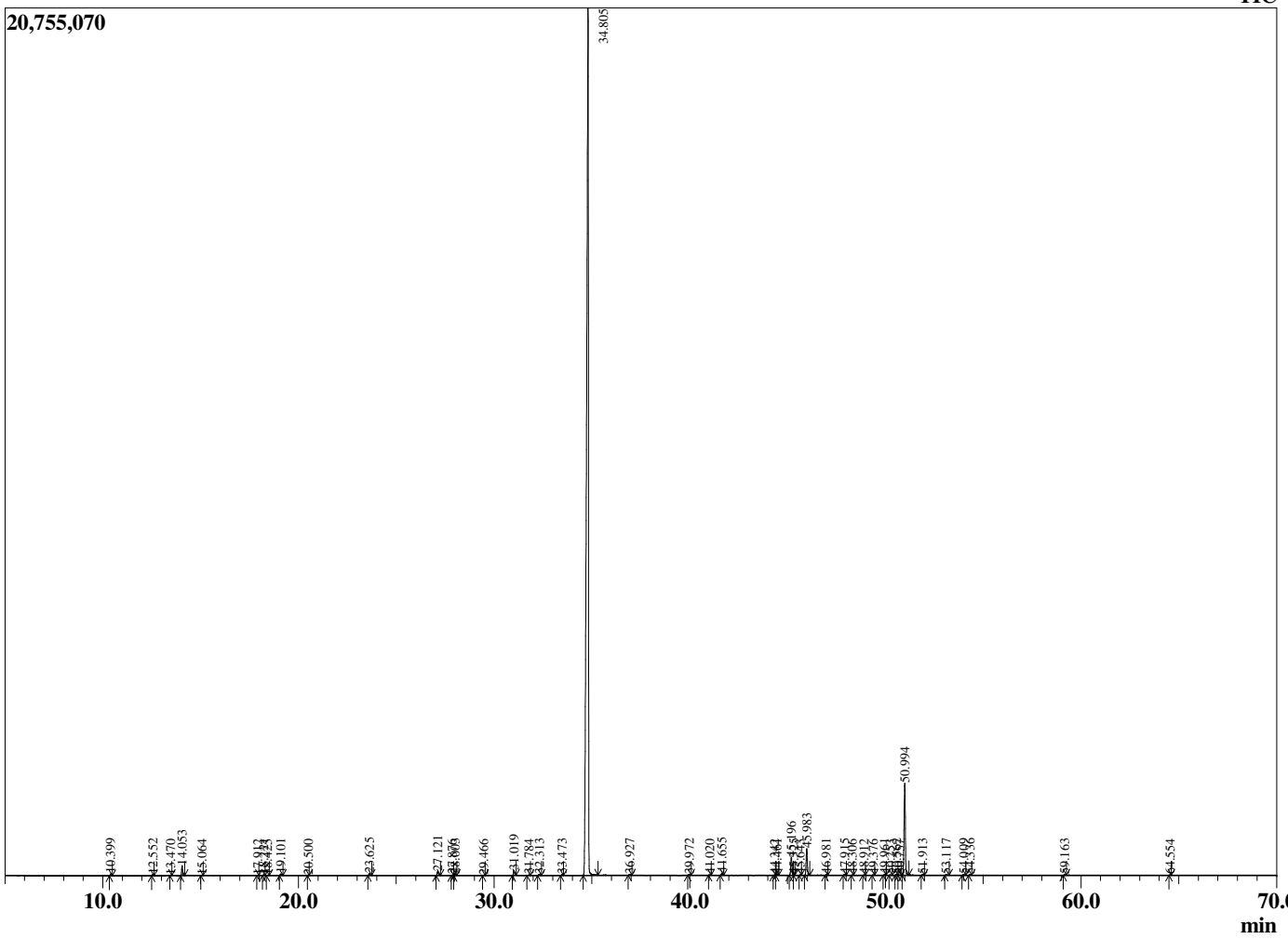
Sample Information

Analyzed by : Dr. Robert S. Pappas
Analyzed : 7/13/2018 10:43:24 PM
Sample Type : Essential Oil
Sample Name : Cassia
Sample ID : D0B0712E
Injection Volume : 0.10
Instrument ID: : GC-3

Chromatogram Cassia



Peak Report TIC

R.Time	Name	Area%
10.399	Styrene	0.07
12.552	alpha-Pinene	0.05
13.470	Camphene	0.02
14.053	Benzaldehyde	0.48
15.064	beta-Pinene	0.01
17.912	para-Cymene	0.01
18.221	Limonene	0.04
18.425	1,8-Cineole	0.02
19.101	Salicylaldehyde	0.09
20.500	Acetophenone	0.01
23.625	Phenethyl alcohol	0.11
27.121	Hydrocinnamaldehyde	0.25
27.876	Borneol	0.02
28.003	2-Methyl benzofuran	0.06
29.466	alpha-Terpineol	0.01
31.019	(Z)-Cinnamaldehyde	0.30
31.784	Hydrocinnamic alcohol	0.03
32.313	ortho-Anisaldehyde	0.08
33.473	2-Phenethyl acetate	0.05
34.805	(E)-Cinnamaldehyde	88.23
36.927	(E)-Cinnamyl alcohol	0.07
39.972	Eugenol	0.04
41.020	Unidentified	0.03
41.655	alpha-Copaene	0.14
44.342	trans-Cinnamic acid	0.02
44.461	beta-Caryophyllene	0.07
45.196	Coumarin	1.17
45.325	trans-alpha-Bergamotene	0.02
45.643	Unidentified	0.01
45.983	(E)-Cinnamyl acetate	1.68
46.981	Alloaromadendrene	0.04
47.915	trans-Cadina-1(6),4-diene	0.04
48.306	Ar-Curcumene	0.01
48.912	Unidentified	0.01
49.376	alpha-Muurolene	0.03
49.961	beta-Bisabolene	0.05
50.253	gamma-Cadinene	0.03
50.562	delta-Cadinene	0.07
50.757	cis-Calamenene	0.02
50.994	ortho-Methoxycinnamaldehyde	6.23
51.913	Unidentified	0.06
53.117	trans-Nerolidol	0.06
54.009	Spathulenol	0.04
54.336	Caryophyllene oxide	0.04
59.163	Unidentified	0.03
64.554	Benzyl benzoate	0.02
		100.00

Comments:

The analysis of this Cassia batch sample meets the expected chemical profile for authentic essential oil of *Cinnamomum cassia*. 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.