

Sample Information

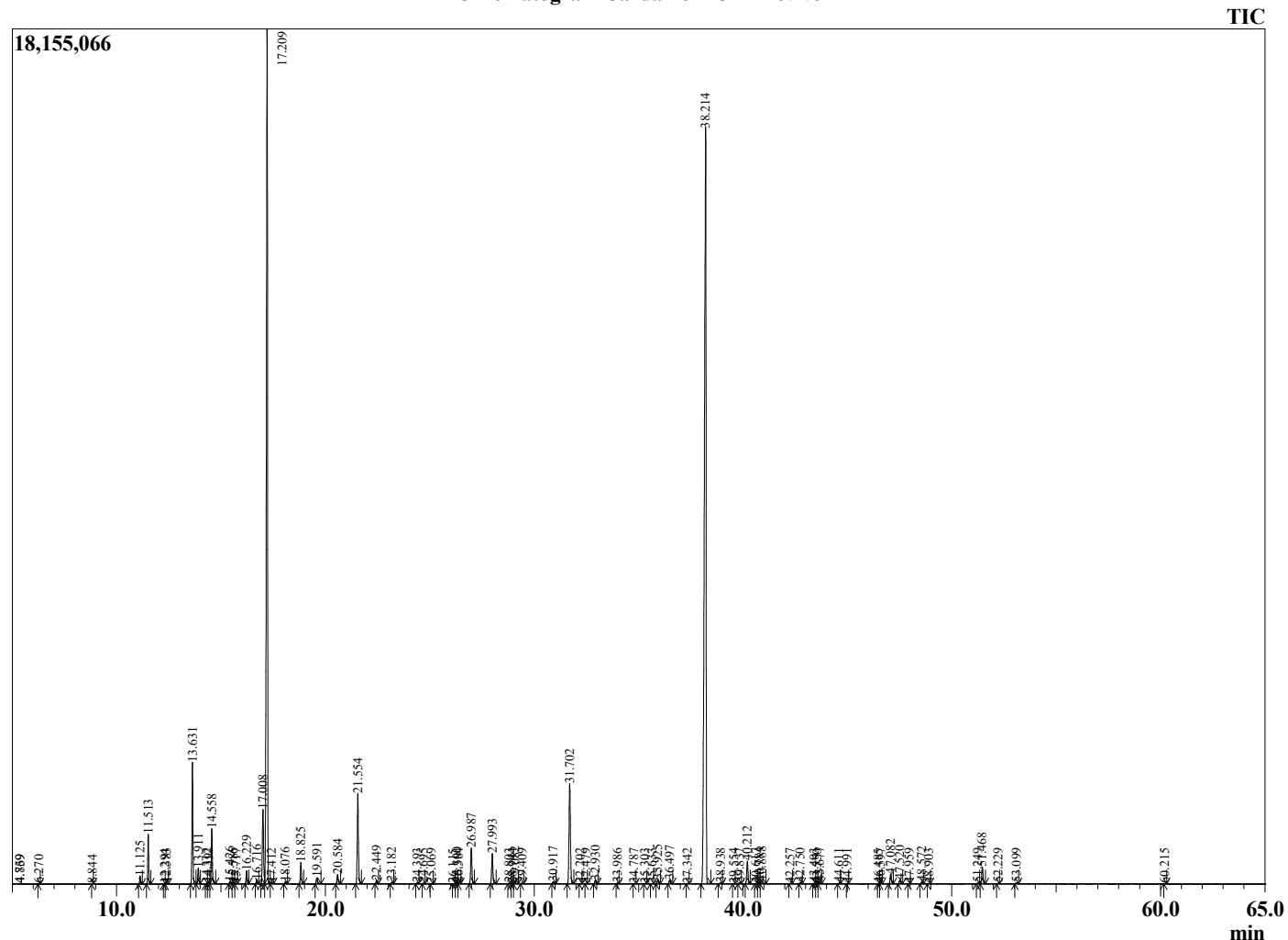
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 12/22/2023 4:36:30 AM
 Sample Type : Essential Oil
 Sample Name : Cardamom Oil - Revive
 Sample ID : 7P
 Injection Volume : 0.10
 Instrument ID: : GC-3



Peak Report TIC

R.Time	Name	Area%
3.712	3-Methylbutanal	0.02
3.811	2-Methylbutanal	0.01
4.769	Isoamyl alcohol	0.01
4.839	2-Methylbutanol	0.01
6.270	Hexanal	0.01
8.844	Isoamyl acetate	0.01
11.125	alpha-Thujene	0.22
11.513	alpha-Pinene	1.41
12.294	alpha-Fenchene	0.01
12.383	Camphene	0.03
13.631	Sabinene	3.65
13.911	beta-Pinene	0.49
14.312	6-Methyl hept-5-en-2-one	0.02
14.392	Methyl 2-hydroxy-4-methylpentanoate	0.03
14.558	Myrcene	1.81
15.426	Octanal	0.07
15.586	alpha-Phellandrene	0.03
15.717	delta-3-Carene	0.01
16.229	alpha-Terpinene	0.43
16.716	para-Cymene	0.15
17.008	Limonene	2.92
17.209	1,8-cineole	32.11
17.412	cis-beta-Ocimene	0.03
18.076	trans-beta-Ocimene	0.07
18.825	gamma-Terpinene	0.73
19.591	trans-Sabinene hydrate	0.25
20.584	Terpinolene	0.35
21.554	Linalool	3.30
22.449	4,8-Dimethyl (E)-nona-1,3,7-triene	0.12
23.182	cis-para-Menth-2-en-1-ol	0.06
24.393	trans-para-Menth-2-en-1-ol	0.03
24.695	Camphor	0.03
25.069	Unidentified	0.01
26.115	Unidentified	0.01
26.300	delta-Terpineol	0.05
26.384	Borneol	0.03
26.987	Terpinen-4-ol	1.36
27.993	alpha-Terpineol	1.17
28.803	Decanal	0.03
28.944	trans-Piperitol	0.02
29.082	Octyl acetate	0.10
29.409	Terpin-1-en-4-yl acetate	0.03
30.917	Neral	0.08
31.702	Linalyl acetate + Geraniol	4.41
32.202	Dec-(4Z)-en-1-ol	0.01
32.479	Unidentified	0.01
32.930	Geranial	0.13
33.986	Bornyl acetate	0.03
34.787	Terpin-1-en-4-yl acetate isomer	0.02
35.303	Unidentified	0.02
35.633	Methyl dec-(4E)-enoate	0.01
35.925	delta-Terpinyl acetate	0.15
36.497	Methyl geranate	0.16
37.342	delta-Elementene	0.01
38.214	alpha-Terpinyl acetate	40.82
38.938	Neryl acetate	0.04
39.554	Isolatedene	0.01
39.837	Methyl dec-(2E)-enoate	0.04
40.212	Geranyl acetate	0.88
40.617	(E)-Methyl cinnamate	0.02
40.784	Tridec-(4E)-en-1-yl acetate	0.05
40.888	beta-Elementene	0.16

Chromatogram Cardamom Oil - Revive



Comments:

The analysis of this Cardamom batch sample meets the expected chemical profile for authentic essential oil of *Elettaria cardamomum*. No contamination or adulteration was detected. The results provided in this GC/MS quality analysis reflect the chemical composition of the oil and lot referenced above on the date of analysis.

R.Time	Name	Area%
42.257	Decyl acetate	0.02
42.750	beta-Caryophyllene	0.03
43.403	gamma-Elemene	0.02
43.550	Unidentified	0.01
43.677	Terpinyl propionate	0.07
44.611	Unidentified	0.02
44.991	alpha-Humulene	0.01
46.485	Unidentified	0.01
46.597	Germacrene D	0.03
47.082	beta-Selinene	0.43
47.520	alpha-Selinene	0.15
47.959	trans-Murrola-4(14),5-diene	0.01
48.572	gamma-Cadinene	0.09
48.903	Unidentified	0.02
51.249	Germacrene B	0.03
51.468	(E)-Nerolidol	0.69
52.229	Dendralasin	0.02
53.099	Globulol	0.04
60.215	(2E,6E)-Farnesol	0.01
		100.00