

### Sample Information

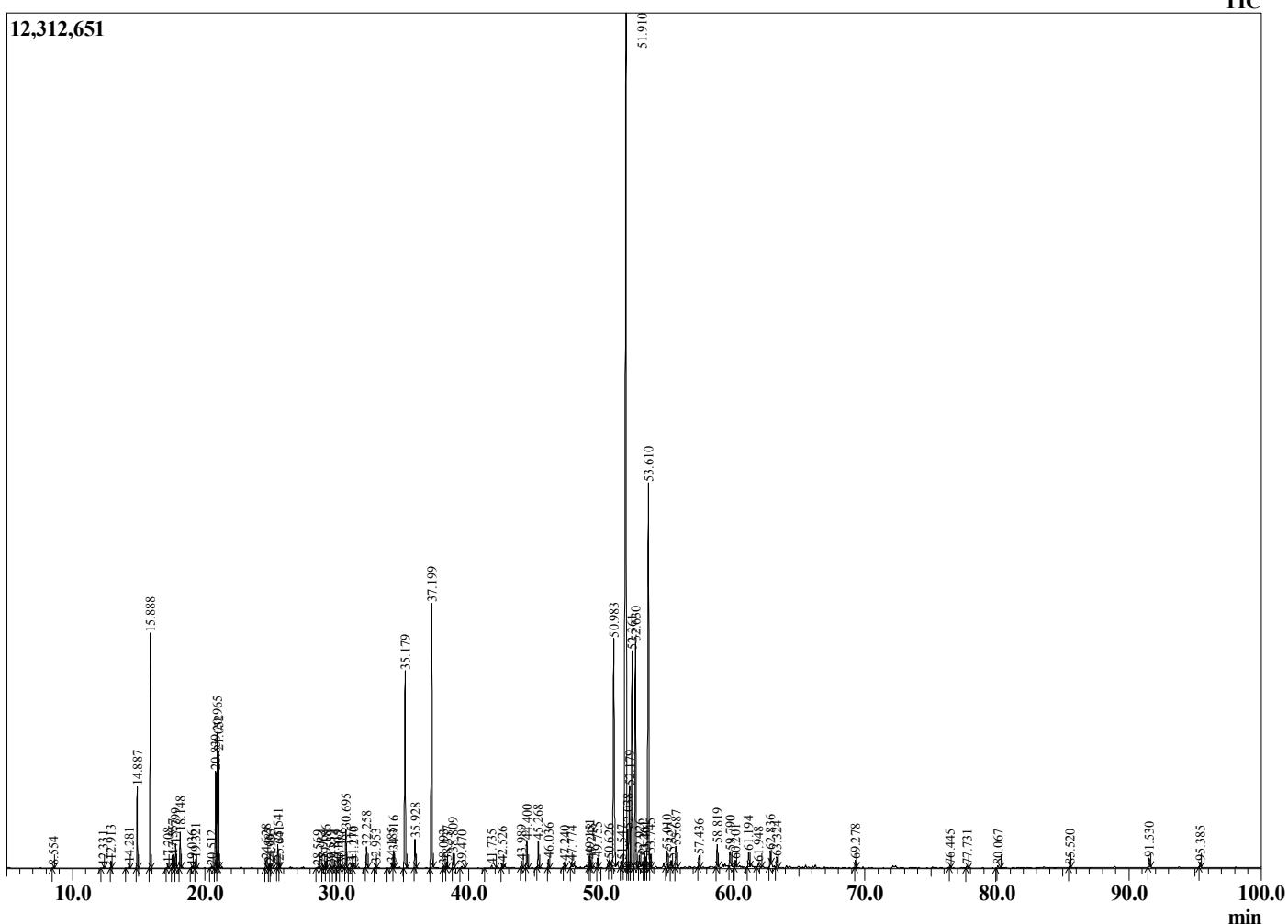
Analyzed by : Dr. Robert S. Pappas  
 Analyzed : 10/27/2020 12:50:01 PM  
 Sample Type : Essential Oil  
 Sample Name : Ginger Oil - Edens Garden  
 Sample ID : BA29IV  
 Injection Volume : 0.10  
 Instrument ID: : GC-2



### Peak Report TIC

R.Time	Name	Area%
8.554	Hexanal	0.05
12.331	2-Heptanone	0.03
12.913	2-Heptanol	0.12
14.281	Tricyclene	0.09
14.887	alpha-Pinene	1.44
15.888	Camphepane	4.30
17.208	Sabinene	0.08
17.557	beta-Pinene	0.24
17.799	6-Methyl-5-hepten-2-one	0.45
18.148	Myrcene	0.66
19.036	Octanal	0.04
19.321	alpha-Phellandrene	0.17
20.512	para-Cymene	0.05
20.839	Limonene	2.05
20.965	beta-Phellandrene	2.78
21.052	1,8-Cineole	2.18
24.628	Terpinolene	0.15
24.887	2-Nonanone	0.10
24.993	Rosefuran	0.09
25.541	Linalool	0.51
25.641	2-Nonanol	0.11
28.569	Unidentified	0.03
28.964	Camphor	0.08
29.186	Citronellal	0.14
29.539	trans-beta-Terpineol	0.05
29.814	Verbenol	0.08
30.105	Isoborneol	0.03
30.386	Unidentified	0.08
30.695	Borneol	0.83
31.115	trans-Isocitral	0.12
31.270	Terpinen-4-ol	0.13
32.258	alpha-Terpineol	0.49
32.953	Decanal	0.08
34.185	Nerol	0.09
34.316	Citronellol	0.35
35.179	Neral	4.92
35.928	Geraniol	0.67
37.199	Geranial	7.15
38.093	Unidentified	0.06
38.337	Bornyl acetate	0.13
38.809	2-Undecanone	0.32
39.470	2-Undecanol	0.07
41.735	delta-Elemene	0.10
42.526	Citronellyl acetate	0.13
43.989	Cyclosativene	0.20
44.400	alpha-Copaene	0.77
45.268	trans-beta-Elemene	0.62
46.036	7-epi-Sesquithujene	0.19
47.240	trans-beta-Caryophyllene	0.12
47.774	gamma-Elemene	0.10
49.151	(E)-beta-Farnesene	0.29
49.248	Unidentified	0.18
49.755	Alliaromadendrene	0.23
50.626	trans-Cadina-1(6),4-diene	0.10
50.983	Ar-Curcumene	6.89
51.547	beta-Selinene	0.15
51.910	alpha-Zingiberene	28.33
52.038	alpha-Selinene	1.04
52.179	trans-Muurola-4(14),5-diene	2.09
52.361	(E,E)-alpha-Farnesene	5.26
52.630	beta-Bisabolene	5.70
52.926	gamma-Cadinene	0.30

Chromatogram Ginger Oil - Edens Garden



### Comments:

The analysis of this Ginger batch sample meets the expected chemical profile for authentic essential oil of *Zingiber officinale*. 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.

R.Time	Name	Area%
53.261	delta-Cadinene	0.21
53.401	alpha-Panasinsene	0.24
53.610	beta-Sesquiphellandrene	10.34
53.745	(E)-gamma-Bisabolene	0.30
55.010	alpha-Elemeol	0.40
55.327	cis-Sesquisabinene hydrate	0.16
55.687	trans-Nerolidol	0.70
57.436	trans-Sesquisabinene hydrate	0.28
58.819	Zingiberenol	0.54
59.790	Unidentified	0.44
60.201	Zingerone	0.15
61.194	alpha-Eudesmol	0.43
61.948	beta-Bisabolol	0.12
62.836	Unidentified	0.31
63.324	Unidentified	0.32
69.278	Unidentified	0.16
76.445	Geranyl-p-cymene	0.07
77.731	Unidentified	0.06
80.067	Unidentified	0.07
85.520	Unidentified	0.05
91.530	[6]-Shogaol	0.23
95.385	[6]-Gingerol	0.12
		100.00