



Aromatic Plant Research Center

We provide uncompromising
quality control for your products.

Customer : doTERRA International
Lot Number : 241998
Date Filled : 07/17/2024

Column : ZB5 (60 m length × 0.25 mm inner diameter × 0.25 µm film thickness)
Instrument : Shimadzu GCMS-QP2010 Ultra
Carrier gas : Helium 80 psi
Temperature ramp : 2 degrees celsius per minute up to 260-degrees celsius
Split ratio : 30:1
Sample preparation : 5%w/v solution with Dichloromethane.



Comments:

The analysis of this Wild Orange lot revealed no contaminants or adulteration.
The sample meets the expected chemical profile for authentic essential oils of Citrus sinensis.

Analysied by : Ambika Poudel
Reviewed by : Dr. Prabodh Satyal



© Copyright 2024 Aromatic Plant Research Center. All rights reserved. Any publishing, copying, use, dissemination, or distribution of this report, including online, without the express written permission of Aromatic Plant Research Center is strictly prohibited.

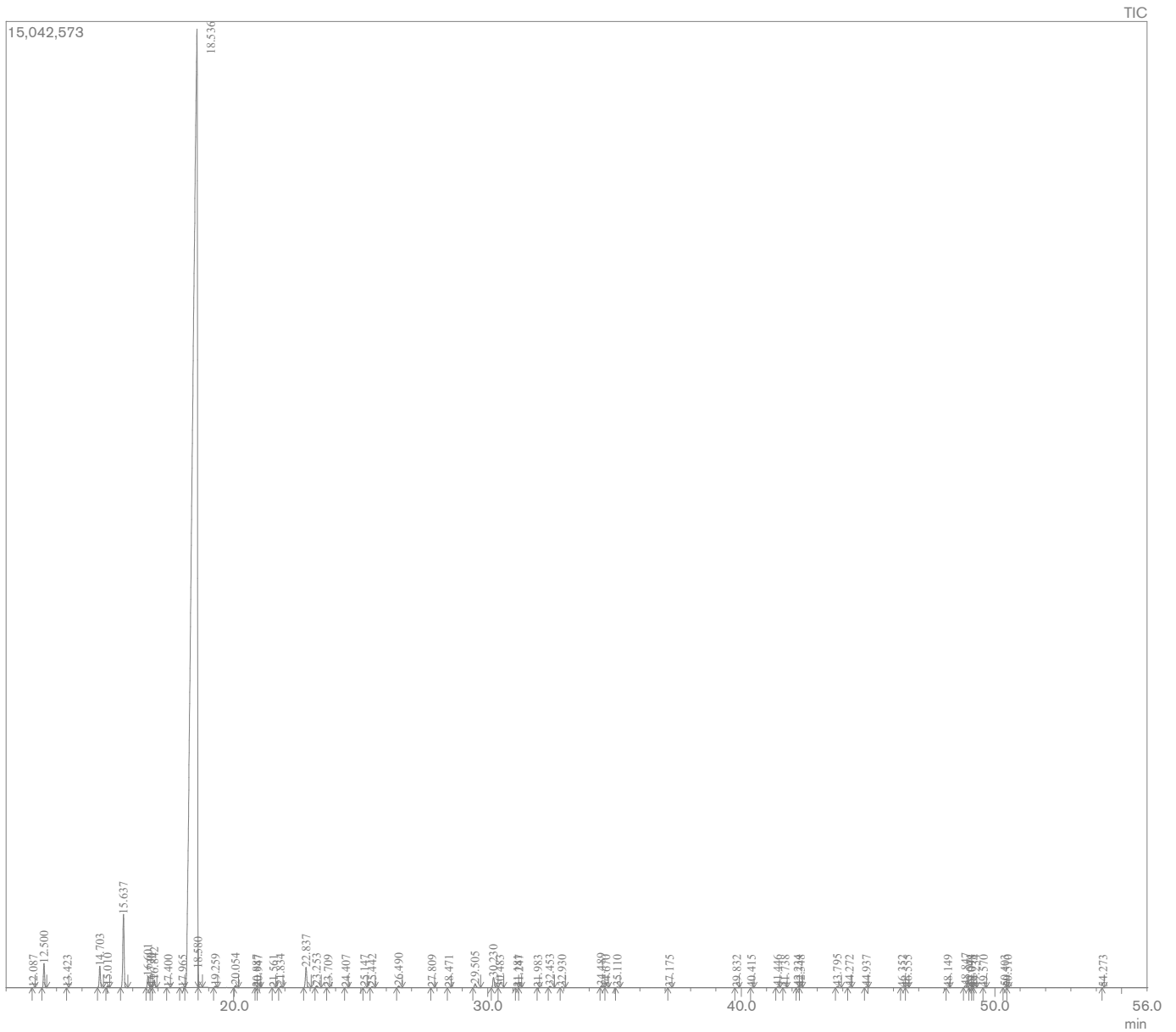
Wild Orange Essential Oil

Customer : doTERRA International

Lot Number : 241998

Date Filled : 07/17/2024

Chromatogram



© Copyright 2024 Aromatic Plant Research Center. All rights reserved. Any publishing, copying, use, dissemination, or distribution of this report, including online, without the express written permission of Aromatic Plant Research Center is strictly prohibited.

Peak Report

Peak#	R.Time	Name	Area%
1	12.087	alpha-Thujene	0.01
2	12.500	alpha-Pinene	0.52
3	13.423	Camphene	0.00
4	14.703	Sabinene	0.50
5	15.010	beta-Pinene	0.04
6	15.637	Myrcene	1.84
7	16.601	n-Octanal	0.30
8	16.730	alpha-Phellandrene	0.05
9	16.842	delta-3-Carene	0.21
10	17.400	alpha-Terpinene	0.00
11	17.965	para-Cymene	0.02
12	18.536	Limonene	94.65
13	18.580	beta-Phellandrene	0.10
14	19.259	trans-beta-Ocimene	0.03
15	20.054	gamma-Terpinene	0.05
16	20.887	cis-Sabinene hydrate	0.01
17	20.947	n-Octanol	0.01
18	21.561	para-Mentha-2,4(8)-diene	0.01
19	21.834	Terpinolene	0.04
20	22.837	Linalool	0.55
21	23.253	n-Nonanal	0.05
22	23.709	2-Methyl-6-methylen-octa-1,7-dien-3-one	0.00
23	24.407	trans-para-Mentha-2,8-dien-1-ol	0.01
24	25.147	cis-Limonene oxide	0.01
25	25.442	trans-Limonene oxide	0.03
26	26.490	Citronellal	0.05
27	27.809	2-trans-Nonenol	0.00
28	28.471	Terpinen-4-ol	0.01
29	29.505	alpha-Terpineol	0.12
30	30.230	n-Decanal	0.31
31	30.483	Octyl acetate	0.01
32	31.181	trans-Carveol	0.00
33	31.247	para-Menth-1-en-9-al	0.00
34	31.983	Epoxy geranial	0.00
35	32.453	Neral	0.04
36	32.930	Carvone	0.02
37	34.489	Geranial	0.07
38	34.670	Isopiperitenone	0.01
39	35.110	Perilla aldehyde	0.02
40	37.175	Undecanal	0.01
41	39.832	Citronellyl acetate	0.00
42	40.415	Neryl acetate	0.00
43	41.446	alpha-Copaene	0.02
44	41.738	Geranyl acetate	0.00
45	42.234	beta-Cubebene	0.02
46	42.348	beta-Elemene	0.01
47	43.795	Dodecanal	0.03
48	44.272	beta-Caryophyllene	0.02
49	44.937	beta-Copaene	0.02
50	46.352	trans-beta-Farnesene	0.01
51	46.555	alpha-Humulene	0.00
52	48.149	Germacrene D	0.01
53	48.847	Valencene	0.07
54	49.044	Bicyclogermacrene	0.00
55	49.098	alpha-Selinene	0.00
56	49.234	alpha-Murolene	0.00
57	49.570	trans-trans-alpha-Farnesene	0.00
58	50.403	delta-Cadinene	0.02
59	50.510	7-epi-alpha-Selinene	0.00
60	54.273	Caryophyllene oxide	0.00
			100.00

