



Essential Validation Services



Sample:

Client: | Nature's Fusions
Sample: | Lemon Eucalyptus (*Eucalyptus citriadora*)
Batch # | L132755
CAS Number | 8008-48-4
Type: | Essential Oil

Conclusion:

- No adulterants, diluents, or contaminants were detected via this method.



X

A handwritten signature in black ink, appearing to read "Adam Christen", is written over a white rectangular background.

Validated By:

Essential Validation Services

747 SW 2nd Ave, Gainesville, FL 32601

Phone: 317-361-5044 E-mail: Adam@essentialvalidationservices.com

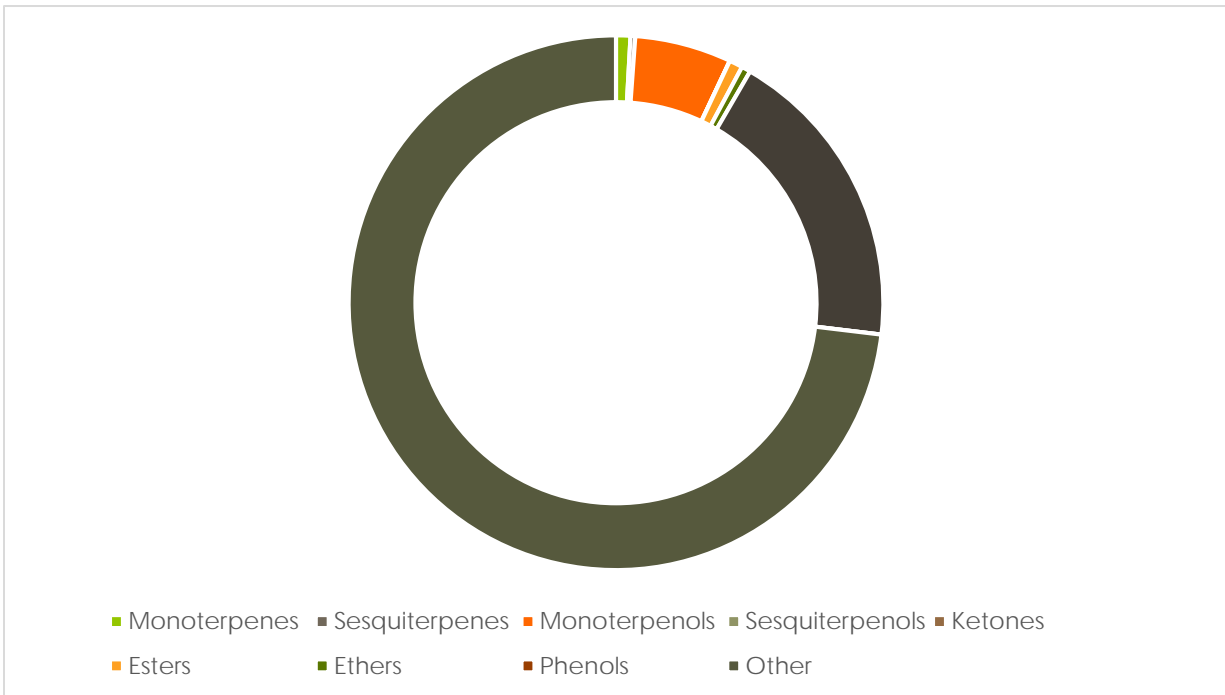
Summary of Analyses

A fresh sample of Lemon Eucalyptus (*Eucalyptus citriadora*) Essential Oil (10 uL in .5to.5 mL Hexane + ETOH) was prepared and analyzed via split injection GC/EI-MS.

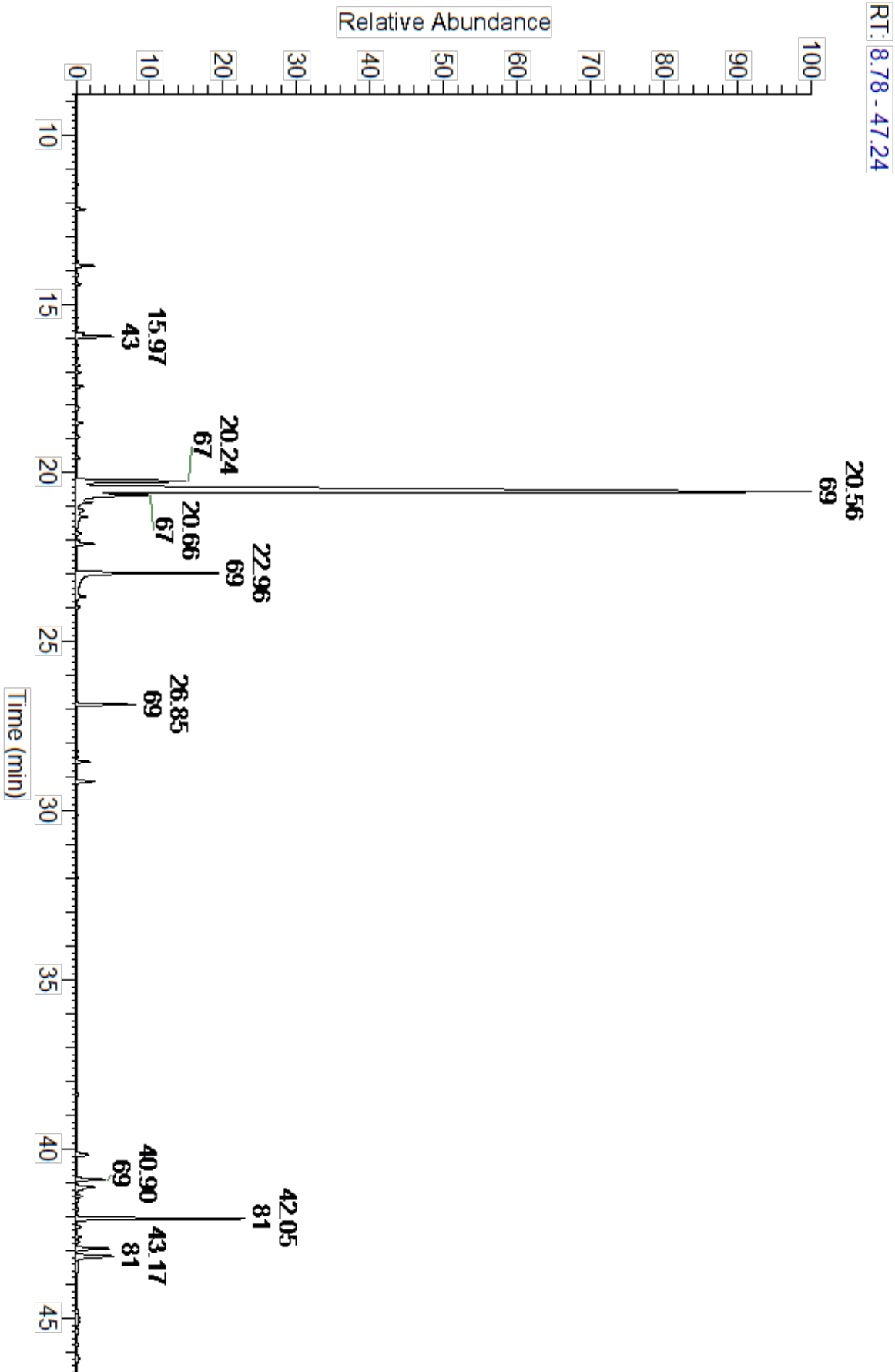


Main Compounds	Percentages
Geranial	40.36%
Neral	28.41%
Geranyl acetate	5.61%
Geraniol	3.18%
beta-Caryophyllene	2.93%
gamma-Cadinene	1.88%
(E)-Isocitral	1.83%
6-Methyl-5-hepten-2-one	1.47%
Limonene	1.36%
Linalool	1.25%
Camphene	1.13%
4-Nonanone	0.87%
delta-Cadinene	0.83%

Monoterpenes	Sesquiterpenes	Monoterpenols	Sesquiterpenols	Ketones
5.11%	7.24%	5.11%	0.00%	2.34%
Esters	Ethers	Aldehydes	Phenols	Other
5.67%	0.20%	71.68%	0.00%	2.65%



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Total Percentage	97.35%				
Peak Number	RT	Area %	Compound Name	RI	Chemical Family
1	11.73	0.12%	Tricyclene	923.20	Monoterpene
2	12.19	0.20%	alpha-Pinene	936.10	Monoterpene
3	12.76	1.13%	Camphene	950.30	Monoterpene
4	14.22	1.47%	6-Methyl-5-hepten-2-one	979.00	Aliphatic Ketone
5	14.39	0.51%	Myrcene	989.20	Monoterpene
6	14.92	0.25%	UK (M/Z: 41, 4, 55, 65, 67, 77, 79, 91, 93)		
7	15.39	0.11%	alpha-Terpinene	1017.10	Monoterpene
8	15.69	0.32%	para-Cymene	1024.30	Monoterpene
9	15.86	1.36%	Limonene	1029.50	Monoterpene
10	15.86	Co-Eluting	beta-Phellandrene	1030.00	Monoterpene
11	16.18	0.30%	(Z)-beta-Ocimene	1037.80	Monoterpene
12	16.58	0.46%	(E)-beta-Ocimene	1047.70	Monoterpene
13	17.01	0.04%	gamma-Terpinene	1063.71	Monoterpene
14	17.48	0.87%	4-Nonanone	1079.30	Aliphatic Ketone
15	18.13	0.20%	Terpinolene	1092.10	Monoterpene
16	18.50	1.25%	Linalool	1099.00	Monoterpenol
17	18.72	0.10%	alpha-Pinene epoxide	1101.00	Monoterpene
18	18.98	0.13%	1,3,8-para-Menthatriene	1108.00	Monoterpene
19	19.55	0.13%	Alloocimene	1129.90	Monoterpene
20	20.11	0.09%	exo-Isocitral	1143.00	Monoterpene Aldehyde
21	20.34	0.24%	trans-Chrysanthemal	1152.00	Monoterpene Aldehyde
22	20.40	0.32%	Isopulegol	1155.00	Monoterpenol
23	20.51	0.05%	Citronellal	1158.43	Monoterpene Aldehyde
24	20.79	0.58%	(Z)-Isocitral	1163.50	Monoterpene Aldehyde
25	20.99	0.13%	Borneol	1168.71	Monoterpenol
26	21.17	0.20%	Rose furan epoxide	1167.00	Monoterpene Ether
27	21.40	1.83%	(E)-Isocitral	1183.57	Monoterpene Aldehyde
28	21.79	0.23%	alpha-Terpineol	1191.71	Monoterpenol
29	22.19	0.12%	Decanal	1206.57	Aliphatic Aldehyde
30	23.50	28.41%	Neral	1246.57	Monoterpene Aldehyde
31	23.87	3.18%	Geraniol	1255.29	Monoterpenol
32	24.48	40.36%	Geranial	1272.00	Monoterpene Aldehyde
33	27.02	0.05%	Citronellyl acetate	1357.83	Monoterpene Ester
34	27.20	0.01%	Neryl acetate	1362.90	Monoterpene Ester
35	27.55	0.27%	Cycloisosativene	1370.50	Sesquiterpene
36	27.78	5.61%	Geranyl acetate	1370.10	Monoterpene Ester
37	28.23	0.46%	beta-Elemene	1389.20	Sesquiterpene
38	29.14	2.93%	beta-Caryophyllene	1427.14	Sesquiterpene
39	29.99	0.18%	cis-Muurola-3,5-diene	1453.00	Sesquiterpene
40	30.12	0.35%	alpha-Humulene	1461.43	Sesquiterpene
41	30.89	0.17%	Germacrene D	1484.71	Sesquiterpene
42	31.78	1.88%	gamma-Cadinene	1515.29	Sesquiterpene



43	31.98	0.83%	delta-Cadinene	1524.14	Sesquiterpene
44	32.27	0.12%	trans-Cadina-1,4-diene	1532.71	Sesquiterpene
45	32.40	0.05%	alpha-Cadinene	1537.86	Sesquiterpene

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