



FLORA RESEARCH LABORATORIES, LLC
ANALYTICAL REPORT

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DATE: December 27, 2019

REPORT: Authentication of Lavender Essential Oil by Qualitative High Resolution Gas Chromatography Mass Spectrometry

CLIENT: WHAS11

FRL JOB ID: J19-1216-B

FRL SAMPLE ID: 191216002

CLIENT SAMPLE ID: QMN-VFES

CLIENT SAMPLE DESCRIPTION: Artizen Lavender 100% Pure Therapeutic Grade Essential Oil 30mL

ANALYSIS DATA:

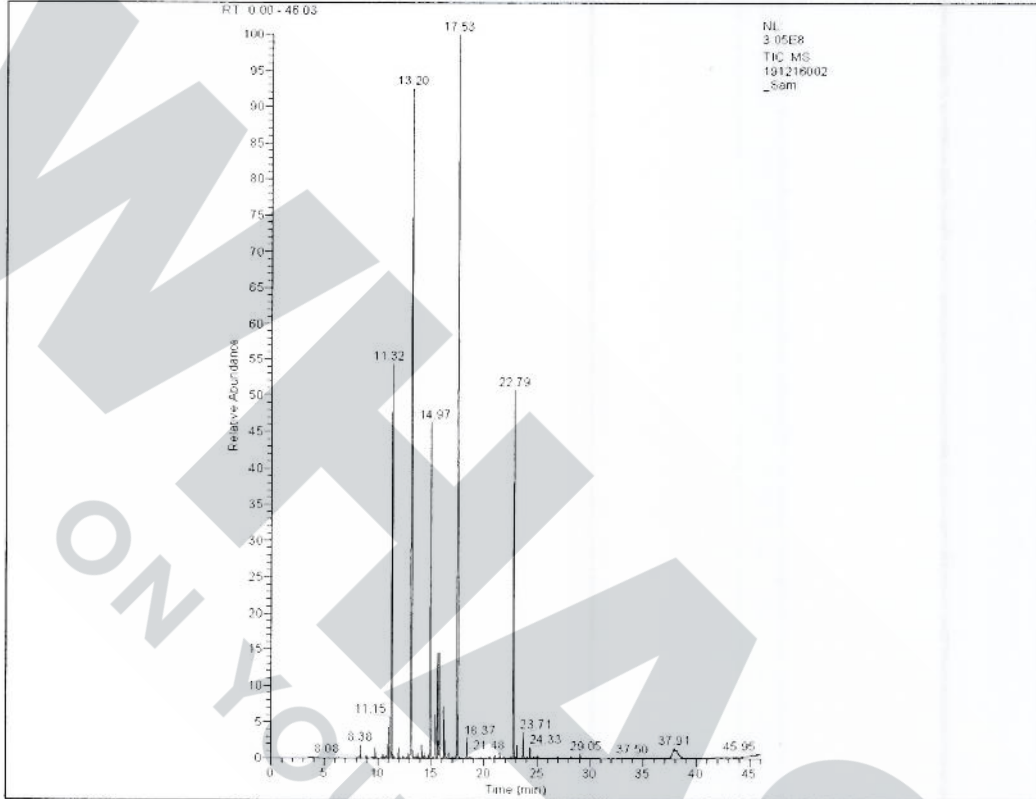
Retention Time (Minutes)	Compound	Area Percent (%)
8.08	Alpha-Thujene	0.03
8.38	Alpha-Pinene	0.27
8.92	Camphene	0.07
9.73	Beta-Pinene + Beta-Myrcene	0.24
10.99	Para-Cymene	0.65
11.15	Beta-Ocimene 1 + Limonene	1.01
11.32	1,8-Cineole	9.53
11.98	Gamma-Terpinene	0.22
12.83	Terpinolene	0.14
13.18	Linalool	30.94
14.96	Camphor	9.08
15.63	Borneol	2.47
15.81	Terpinen-4-ol	2.36
16.18	Alpha-Terpineol	1.18
17.52	Linalyl Acetate	26.00
18.37	Lavandulyl Acetate	0.46
22.79	Beta-Caryophyllene	9.33
23.71	Alpha-Humulene	0.63
24.33	Germacrene D	0.31

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RESULT: Sample does not conform to the profile of *Lavandula angustifolia* oil. The sample material contains an elevated amount of 1,8-Cineole and Camphor, which is consistent with *Lavandula x intermedia* (Lavandin) oil.

Analyzed/Reported By:


Pierce Prozy
Assistant Laboratory Manager

Date: 12/27/2019

QC Approval By:


James Neal-Kababick
Laboratory Director

Date: 12/27/2019

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CLIENT: WHAS11

FRL JOB ID: J19-1216-B

FRL SAMPLE ID: 191216003

CLIENT SAMPLE ID: 8402

CLIENT SAMPLE DESCRIPTION: Revive Organic Lavender 100% Pure Essential Oil 10mL

ANALYSIS DATA:

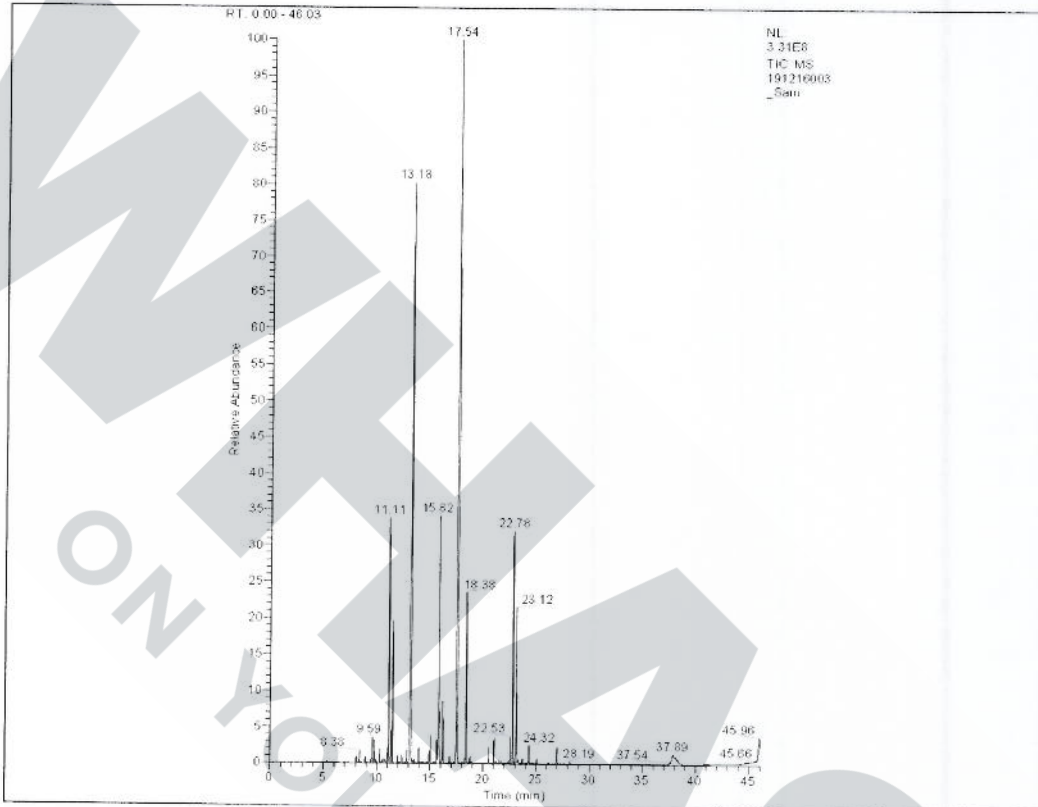
Retention Time (Minutes)	Compound	Area Percent (%)
8.08	Alpha-Thujene	0.17
8.38	Alpha-Pinene	0.28
8.92	Camphene	0.14
9.74	Beta-Pinene + Beta-Myrcene	0.50
11.10	Beta-Ocimene 1 + Limonene	6.14
11.30	1,8-Cineole	0.97
11.45	Beta-Ocimene 2	3.20
11.97	Gamma-Terpinene	0.20
12.83	Terpinolene	0.32
13.16	Linalool	26.04
15.03	Camphor + Unknown 1	0.91
15.63	Borneol	0.59
15.82	Terpinen-4-ol	6.85
16.18	Alpha-Terpineol	1.54
17.53	Linalyl Acetate	29.87
18.38	Lavandulyl Acetate	4.23
20.49	Neryl Acetate	0.42
21.02	Geranyl Acetate	0.60
22.78	Beta-Caryophyllene	6.07
23.71	Alpha-Humulene	0.15
24.33	Germacrene D	0.55
26.96	Caryophyllene Oxide	0.52

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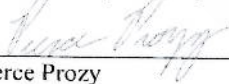
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RESULT: Sample conforms to the profile of *Lavandula angustifolia* oil.

Analyzed/Reported By:


Pierce Prozy
Assistant Laboratory Manager

Date: 12/27/2019

QC Approval By:


James Neal-Kababick
Laboratory Director

Date: 12/27/2019

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CLIENT: WHAS11

FRL JOB ID: J19-1216-B

FRL SAMPLE ID: 191216004

CLIENT SAMPLE ID: 87833

CLIENT SAMPLE DESCRIPTION: Young Living Lavender 100% Pure, Therapeutic-Grade Essential Oil 15mL

ANALYSIS DATA:

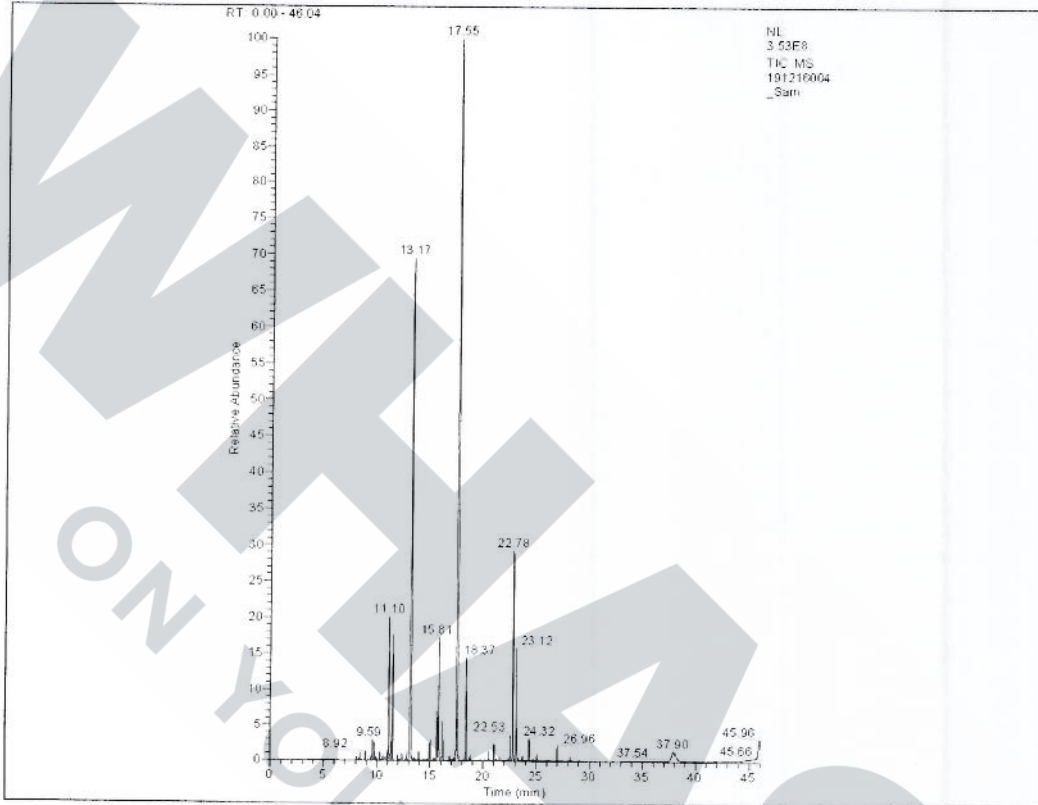
Retention Time (Minutes)	Compound	Area Percent (%)
8.08	Alpha-Thujene	0.12
8.38	Alpha-Pinene	0.21
8.92	Camphene	0.23
9.74	Beta-Pinene + Beta-Myrcene	0.47
10.55	3-Carene	0.17
10.79	Alpha-Terpinene	0.14
11.10	Beta-Ocimene 1 + Limonene	4.25
11.30	1,8-Cineole	0.94
11.45	Beta-Ocimene 2	3.20
11.97	Gamma-Terpinene	0.15
12.83	Terpinolene	0.27
13.15	Linalool	24.60
14.93	Camphor	0.53
15.63	Borneol	1.62
15.81	Terpinen-4-ol	3.68
16.18	Alpha-Terpineol	1.12
17.53	Linalyl Acetate	36.94
18.37	Lavandulyl Acetate	2.89
20.49	Neryl Acetate	0.31
21.01	Geranyl Acetate	0.47
22.78	Beta-Caryophyllene	6.47
23.71	Alpha-Humulene	0.15
24.32	Germaacrene D	0.74
26.96	Caryophyllene Oxide	0.54

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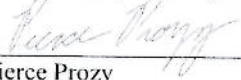
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RESULT: Sample conforms to the profile of *Lavandula angustifolia* oil.

Analyzed/Reported By:


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Date: 12/27/2019

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Laboratory Director

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