



Essential Validation Services



Sample:

Client: | Nature's Fusions
Sample: | Juniper Berry (*Juniperus communis*)
Batch # | 1706072
CAS Number | 8002-68-4
Type: | Essential Oil

Conclusion:

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



X 

Validated By:

Essential Validation Services

747 SW 2nd Ave, Gainesville, FL 32601

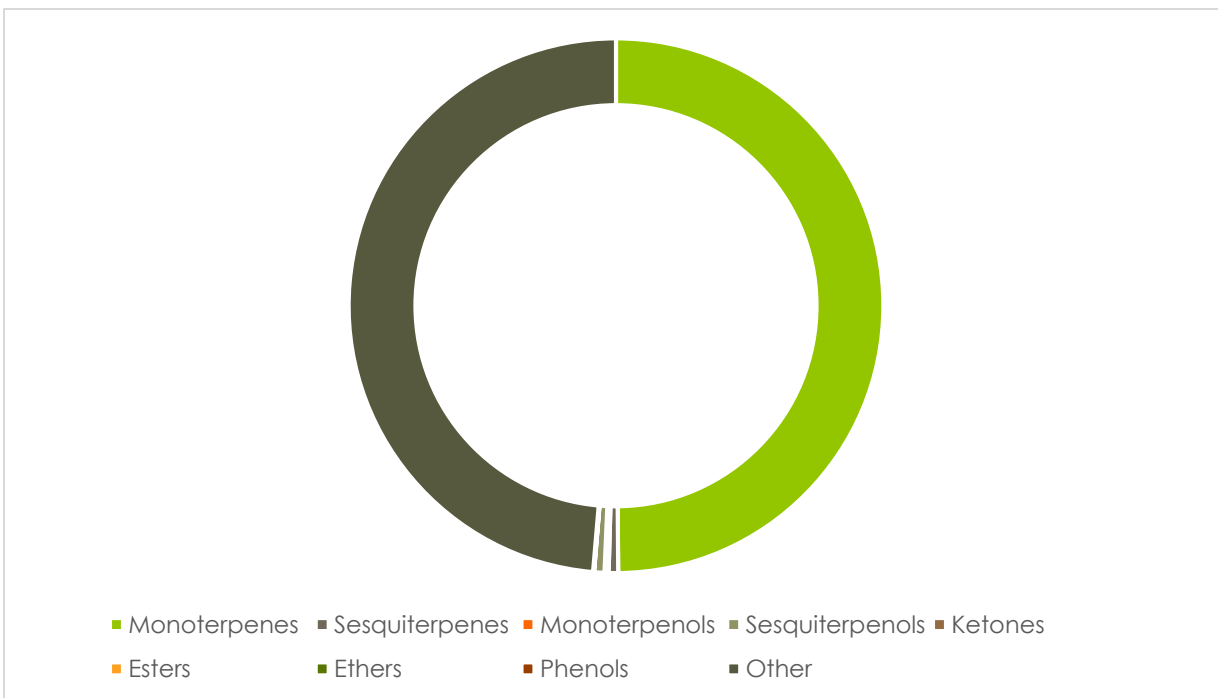
Phone: 317-361-5044 E-mail: Adam@essentialvalidationservices.com

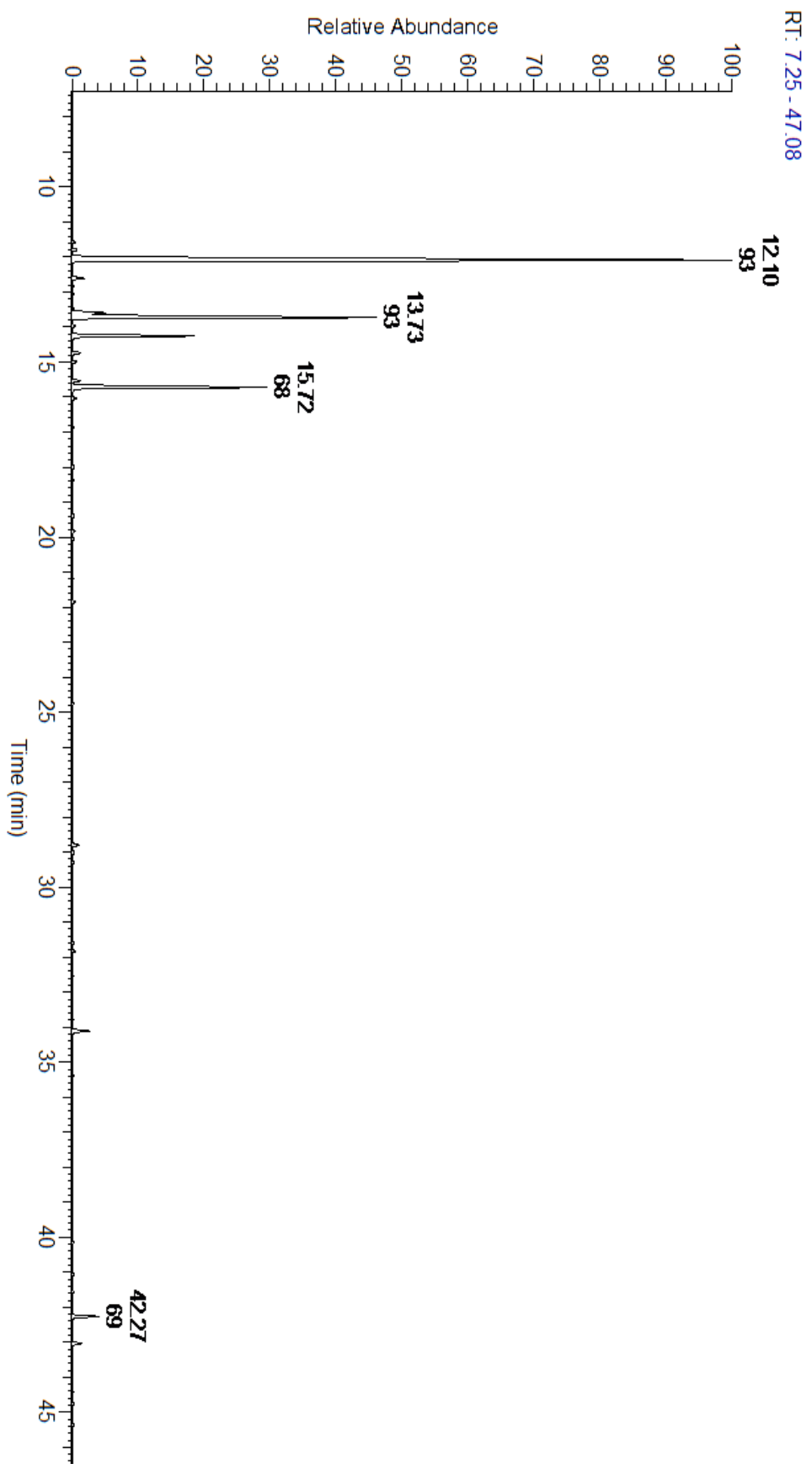
Summary of Analyses

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

Main Compounds	Percentages
alpha-Pinene	51.09%
beta-Pinene	19.44%
Limonene	11.77%
Myrcene	6.50%
Sabinene	2.13%
Cembrene A	1.40%
Cedrol	1.06%
Camphene	0.69%
13-epi-Manool oxide?	0.52%
Pseudolimonene	0.51%
para-Cymene	0.43%
alpha-Cedrene	0.38%
alpha-Thujene	0.31%

Monoterpenes	Sesquiterpenes	Monoterpenols	Sesquiterpenols	Ketones
94.25%	1.08%	0.47%	1.17%	0.03%
Esters	Ethers	Aldehydes	Phenols	Other
0.08%	0.01%	0.00%	0.00%	2.91%





ESSENTIAL VALIDATION SERVICES | 747 SW 2ND AVE GAINESVILLE, FLORIDA 32601 | 317-361-5044

Total Percentage	98.59%				
Peak Number	RT	Area %	Compound Name	RI	Chemical Family
1	11.58	0.16%	Tricyclene	923.00	Monoterpene
2	11.79	0.31%	alpha-Thujene	927.80	Monoterpene
3	12.10	51.09%	alpha-Pinene	936.10	Monoterpene
4	12.61	0.69%	Camphene	950.30	Monoterpene
5	12.83	0.08%	Thuja-2,4(10)-diene	953.00	Monoterpene
6	13.23	0.01%	Verbenene	961.00	Monoterpene
7	13.60	2.13%	Sabinene	973.00	Monoterpene
8	13.73	19.44%	beta-Pinene	974.00	Monoterpene
9	13.97	0.17%	trans-Isolimonene	980.50	Monoterpene
10	14.26	6.50%	Myrcene	989.20	Monoterpene
11	14.74	0.51%	Pseudolimonene	1003.00	Monoterpene
12	15.00	0.26%	delta-3-Carene	1008.00	Monoterpene
13	15.25	0.03%	alpha-Terpinene	1014.00	Monoterpene
14	15.54	0.43%	para-Cymene	1024.30	Monoterpene
15	15.72	11.77%	Limonene	1029.50	Monoterpene
16	15.72	Co-Eluting	1,8-Cineole	1031.80	Monoterpene Ether
17	15.72	Co-Eluting	beta-Phellandrene	1030.00	Monoterpene
18	16.03	0.24%	(Z)-beta-Ocimene	1037.80	Monoterpene
19	16.86	0.06%	gamma-Terpinene	1054.00	Monoterpene
20	17.98	0.14%	Terpinolene	1092.10	Monoterpene
21	18.36	0.08%	alpha-Pinene epoxide	1101.00	Monoterpene
22	19.41	0.15%	Alloocimene	1129.90	Monoterpene
23	19.84	0.14%	alpha-Pinocarveol	1143.75	Monoterpenol
24	20.05	0.08%	trans-Verbenol	1149.00	Monoterpenol
25	21.18	0.04%	Terpinen-4-ol	1180.57	Monoterpenol
26	21.64	0.02%	alpha-Terpineol	1191.71	Monoterpenol
27	21.85	0.16%	Myrtenol	1198.00	Monoterpenol
28	22.30	0.03%	Verbenone	1209.71	Monoterpene Ketone
29	22.60	0.03%	trans-Carveol	1223.14	Monoterpenol
30	24.76	0.08%	Bornyl acetate	1288.29	Monoterpene Ester
31	26.40	0.01%	delta-Elemene	1335.83	Sesquiterpene
32	28.80	0.38%	alpha-Cedrene	1410.75	Sesquiterpene
33	29.04	0.18%	beta-Cedrene	1419.50	Sesquiterpene
34	29.28	0.14%	gamma-Elemene	1434.00	Sesquiterpene
35	30.91	0.01%	beta-Selinene	1487.57	Sesquiterpene
36	31.20	0.03%	alpha-Muurolene	1500.25	Sesquiterpene
37	31.42	0.02%	Cuparene	1508.50	Sesquiterpene
38	31.60	0.12%	gamma-Cadinene	1515.29	Sesquiterpene
39	31.83	0.17%	delta-Cadinene	1524.14	Sesquiterpene
40	32.42	0.02%	Germacrene B	1557.71	Sesquiterpene
41	32.54	0.05%	(E)-Nerolidol	1567.00	Sesquiterpenol
42	33.58	0.01%	Caryophyllene oxide	1594.86	Sesquiterpene Ether



43	34.11	1.06%	Cedrol	1600.04	Sesquiterpenol
44	35.40	0.06%	alpha-Cadinol	1655.00	Sesquiterpenol
45	42.27	1.40%	Cembrene A	1931.00	Diterpene
46	43.03	0.52%	13-epi-Manool oxide?		
47	45.35	0.10%	Abietadiene	2080.00	Diterpene

- This report is the digitally signed and will only be considered valid if the signature is intact.
- This report may not be published without the consent of Essential Validation Services.
- Chromatograph image may not show full run time