



Essential Validation Services



Sample:

Client: | Floracopeia
Sample: | German Blue Chamomile (*Matricaria chamomilla*)
Batch # | CHBL17120401
Cas Number | 8002-66-2
Type: | Essential Oil

Conclusion:

- No adulterants, diluents, or contaminants were detected via this method.
- This oil meets the expected profile for genuine essential oil of German Blue Chamomile (*Matricaria chamomilla*).

X



Validated By:



Essential Validation Services

747 SW 2nd Ave, Gainesville, FL 32601

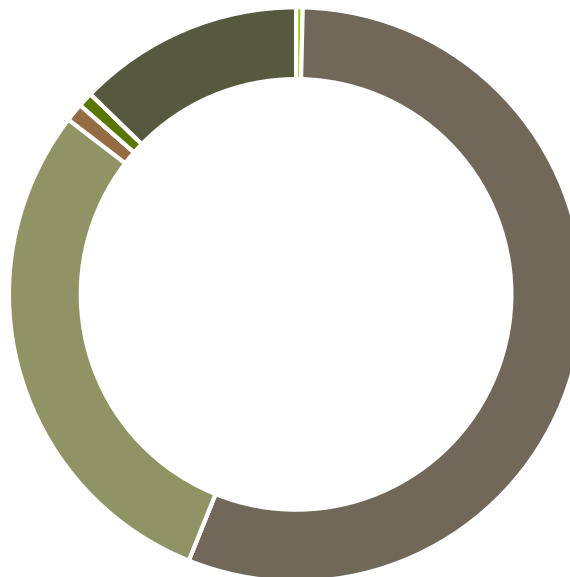
Phone: 317-361-5044 E-mail: Adam@essentialvalidationservices.com

Summary of Analyses

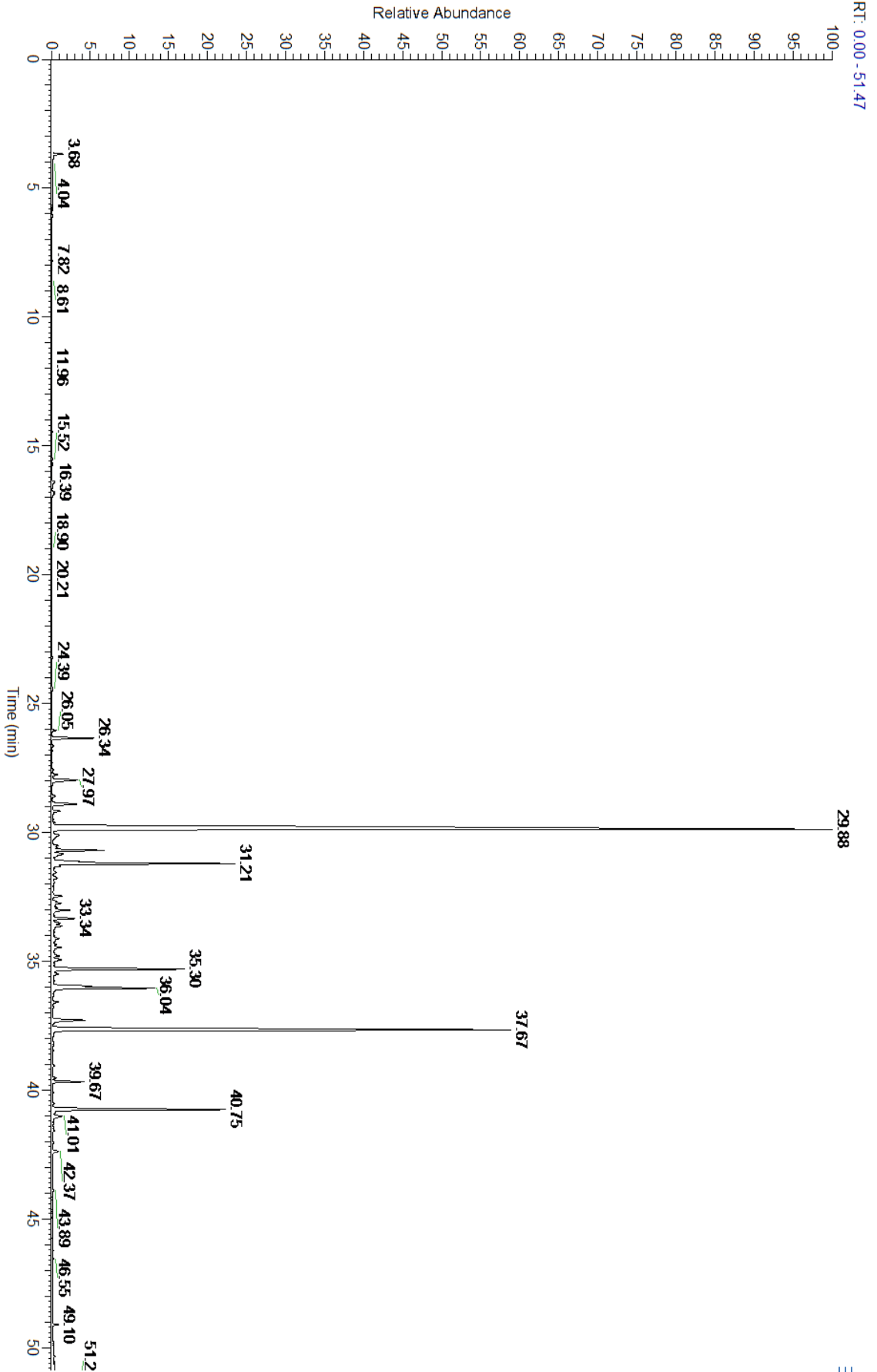
A fresh sample of German Blue Chamomile (*Matricaria chamomilla*) Essential Oil (10 uL in .5 to .5 mL Hexane + ETOH) was prepared and analyzed via split injection GC/EI-MS.

Main Compounds	Percentages
(E)-beta-Farnesene	42.04%
alpha-Bisabolol oxide A	18.62%
cis-Spiro ether	6.19%
(E,E)-alpha-Farnesene	5.58%
alpha-Bisabolol oxide B	4.48%
alpha-Bisabolone oxide	3.40%
Germacrene D	1.63%
Chamazulene	1.28%
delta-Elemene	1.26%
epi-beta-Bisabolol	1.09%
alpha-Isocomene	1.08%
beta-Caryophyllene	1.01%
Phytone	0.92%

Monoterpenes	Sesquiterpenes	Monoterpenols	Sesquiterpenols	Ketones
0.37%	55.73%	0.00%	29.32%	1.03%
Esters	Ethers	Aldehydes	Phenols	Other
0.00%	0.84%	0.00%	0.00%	12.71%



- Monoterpenes ■ Sesquiterpenes ■ Monoterpenols
- Sesquiterpenols ■ Ketones ■ Esters
- Ethers ■ Phenols ■ Other



Total Percentage		95.68%			
Peak Number	RT	Area %	Compound Name	RI	Chemical Family
1	11.96	0.01%	alpha-Pinene	936.10	Monoterpene
2	13.56	0.01%	Sabinene	973.00	Monoterpene
3	14.94	0.01%	delta-3-Carene	1008.00	Monoterpene
4	15.52	0.03%	para-Cymene	1024.30	Monoterpene
5	15.66	0.02%	Limonene	1029.50	Monoterpene
6	15.74	0.01%	1,8-Cineole	1031.80	Monoterpene Ether
7	16.02	0.01%	(Z)-beta-Ocimene	1037.80	Monoterpene
8	16.39	0.18%	(E)-beta-Ocimene	1047.70	Monoterpene
9	16.79	0.11%	gamma-Terpinene	1054.00	Monoterpene
10	16.87	0.11%	Artemisia ketone	1057.00	Monoterpene Ketone
11	26.34	1.26%	delta-Elemene	1335.83	Sesquiterpene
12	26.82	0.01%	alpha-Longipinene	1357.90	Sesquiterpene
13	27.57	0.06%	alpha-Copaene	1379.00	Sesquiterpene
14	27.76	0.18%	Modheph-2-ene	1381.50	Sesquiterpene
15	27.97	1.08%	alpha-Isocomene	1387.00	Sesquiterpene
16	28.59	0.11%	alpha-Gurjunene	1412.00	Sesquiterpene
17	28.91	1.01%	beta-Caryophyllene	1427.14	Sesquiterpene
18	29.17	0.26%	beta-Copaene	1445.00	Sesquiterpene
19	29.49	0.03%	Aromadendrene	1449.80	Sesquiterpene
20	29.88	42.04%	(E)-beta-Farnesene	1456.29	Sesquiterpene
21	30.11	0.44%	allo-Aromadendrene	1471.00	Sesquiterpene
22	30.51	0.18%	gamma-Murolene	1478.86	Sesquiterpene
23	30.59	0.13%	alpha-Amorphene	1481.75	Sesquiterpene
24	30.70	1.63%	Germacrene D	1484.71	Sesquiterpene
25	30.82	0.61%	Bicyclogermacrene	1490.71	Sesquiterpene
26	31.13	0.70%	alpha-Selinene	1492.50	Sesquiterpene
27	31.21	5.58%	(E,E)-alpha-Farnesene	1508.14	Sesquiterpene
28	31.30	0.22%	beta-Bisabolene	1509.86	Sesquiterpene
29	31.77	0.20%	delta-Cadinene	1524.14	Sesquiterpene
30	32.47	0.29%	Thujopsenal		
31	32.75	0.35%	(E)-Nerolidol	1567.00	Sesquiterpenol
32	33.02	0.56%	Dendrolasin	1573.35	Sesquiterpene Ether
33	33.34	0.75%	Spathulenol	1587.00	Sesquiterpenol
34	33.52	0.27%	Caryophyllene oxide	1594.86	Sesquiterpene Ether
35	34.46	0.32%	Fokienol		
36	34.79	0.28%	1,10-di-epi-Cubenol	1612.29	Sesquiterpenol
37	34.94	0.35%	T-Cadinol	1640.43	Sesquiterpenol
38	35.30	4.48%	alpha-Bisabolol oxide B	1655.15	Sesquiterpenol
39	35.96	1.09%	epi-beta-Bisabolol	1678.50	Sesquiterpenol
40	36.04	3.40%	alpha-Bisabolone oxide	1682.00	Sesquiterpenol
41	37.29	1.28%	Chamazulene	1717.50	Azulene
42	37.67	18.62%	alpha-Bisabolol oxide A	1744.50	Sesquiterpenol
43	39.67	0.92%	Phytone	1854.00	Aliphatic Ketone

