



Essential Oil University

GC/MS Report

Item	Lot
Elemi Oil, Philippines <i>Canarium luzonicum</i>	5H
Date	Analyst
1/16/2025	Dr. Robert S. Pappas

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The analysis of this batch sample, Elemi Oil, Philippines, meets the expected chemical profile for authentic essential oil of *Canarium luzonicum*. No contamination or adulteration was detected. The results provided in this GCMS quality analysis reflect the chemical composition of the oil and lot referenced above on the date of analysis.



Sample Information

Company: Revive**Sample Name:** Elemi Oil, Philippines**Botanical Name:** *Canarium luzonicum***Lot Number:** 5H**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** Philippines**Analysis Date:** 1/16/2025**Manufacture Date:** December 2024

GC/MS

Inst. ID: Shimadzu GCMS-QP2010Ultra**Injection Type:** Split**Split Ratio:** 24.4**Column Type:** ZB-5**Injection Volume:** 0.1 µL**Temperature Program:** 2C/min

Physical Data

ANALYSIS

Optical Rotation @20°C

Refractive Index @20°C

Specific Gravity @20°C

METHOD

USP[781]

USP[831]

USP[841]

RESULTS

+68.88

1.47693

0.86278



Ret. Time	Component	Ret. Idx.	Conc. %	
5.823	Toluene	763	0.01%	IFRA
11.644	alpha-Thujene	924	0.08%	
12.044	alpha-Pinene	931	0.29%	
12.931	Camphene	947	0.02%	
14.190	Sabinene	970	4.68%	
14.480	beta-Pinene	976	0.81%	
15.107	Myrcene	987	0.45%	
16.012	Pseudolimonene	1003	0.03%	
16.189	alpha-Phellandrene	1006	15.16%	
16.305	delta-3-Carene	1008	0.15%	
16.808	alpha-Terpinene	1016	0.34%	
17.299	para-Cymene	1023	1.56%	IFRA
17.705	Limonene	1029	59.09%	
17.760	beta-Phellandrene	1030	0.12%	
17.805	1,8-Cineole	1031	0.35%	
17.985	cis-beta-Ocimene	1034	0.12%	
18.650	trans-beta-Ocimene	1044	0.14%	
19.282	Terpinene analogue	1054	0.01%	
19.426	gamma-Terpinene	1056	0.21%	
20.193	trans-Sabinene hydrate	1068	0.05%	
21.213	Terpinolene	1084	0.87%	
21.543	para-Cymenene	1089	0.01%	
22.236	cis-Sabinene hydrate	1099	0.01%	
23.650	trans-para-Mentha-2,8-dienol	1120	0.03%	
23.836	cis-para-Menth-2-en-1-ol	1123	0.02%	
24.092	allo-Ocimene	1126	0.01%	
24.405	cis-Limonene oxide	1131	0.03%	
24.642	cis-para-Mentha-2,8-dienol	1134	0.03%	
24.680	trans-Limonene oxide	1135	0.02%	
25.060	Unidentified	1140	0.01%	
25.374	Camphor	1145	0.02%	
25.552	Unidentified	1148	0.01%	
26.950	Carvenone isomer	1168	0.03%	
27.095	Borneol	1170	0.01%	
27.227	Carvenone isomer	1172	0.04%	
27.545	Unidentified	1177	0.01%	
27.683	Terpinen-4-ol	1179	0.26%	
28.117	para-Cymen-8-ol	1185	0.07%	
28.692	alpha-Terpineol	1193	1.48%	
29.025	Isopiperitenol analogue	1198	0.02%	



Ret. Time	Component	Ret. Idx.	Conc. %	
29.224	alpha-Phellandrene epoxide	1201	0.09%	
29.636	trans-Piperitol	1207	0.01%	
30.306	trans-Carveol	1217	0.03%	
30.586	Unidentified	1221	0.01%	
31.206	cis-Carveol	1230	0.03%	
31.754	alpha-Phellandrene epoxide isomer	1238	0.01%	
32.002	Carvone	1242	0.03%	IFRA
32.258	Unidentified	1246	0.02%	
32.360	Carvotanacetone	1247	0.01%	
32.665	Piperitone	1252	0.03%	
35.658	Carvacrol	1296	0.03%	
36.426	Unidentified	1307	0.01%	
37.069	Unidentified	1317	0.05%	
37.670	Unidentified	1326	0.01%	
38.108	delta-Elemene	1333	0.01%	
38.872	alpha-Cubebene	1345	0.01%	
40.746	alpha-Copaene	1373	0.06%	
41.517	Unidentified	1385	0.01%	
41.643	beta-Elemene	1387	0.06%	
41.853	Unidentified	1390	0.02%	
42.322	Methyleugenol	1397	0.15%	IFRA
43.532	beta-Caryophyllene	1416	0.16%	
43.927	Unidentified	1423	0.01%	
44.172	gamma-Elemene	1427	0.01%	
45.374	Unidentified	1446	0.01%	
45.776	alpha-Humulene	1452	0.05%	
46.654	Unidentified	1467	0.01%	
47.367	Germacrene D	1478	0.05%	
47.988	Viridiflorene	1488	0.01%	
48.268	Unidentified	1492	0.01%	
48.465	alpha-Muurolene	1496	0.02%	
49.660	delta-Amorphene	1516	0.03%	
49.680	Elemol isomer	1516	0.04%	
51.405	Elemicin	1545	3.26%	
51.466	Elemol	1546	8.18%	
54.256	Guaiol	1593	0.11%	
55.175	Eudesm-5-en-11-ol	1609	0.01%	
56.266	gamma-Eudesmol	1629	0.17%	
57.561	alpha-Eudesmol	1652	0.36%	
57.770	Unidentified	1655	0.01%	



Ret. Time	Component	Ret. Idx.	Conc. %	
58.134	Bulnesol	1662	0.02%	
64.203	Unidentified	1773	0.01%	
65.098	Phellandrene dimer	1790	0.05%	
65.470	Unidentified	1797	0.01%	
66.242	Cryptomeridiol	1812	0.02%	
66.849	Unidentified	1824	0.04%	

Total Identified Compounds **99.74 %**

