



Essential Oil University

GC/MS Report

Item	Lot
Elemi Oil, Philippines <i>Canarium luzonicum</i>	8F
Date	Analyst
6/11/2025	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:** 8F**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** Philippines**Analysis Date:** 6/11/2025**Manufacture Date:** March 2025

GC/MS

Inst. ID: Shimadzu GCMS-QP2010Ultra**Injection Type:** Split**Split Ratio:** 24.4**Column Type:** ZB-5**Injection Volume:** 0.1 μ L**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

+67.32

1.47724

0.86385



Ret. Time	Component	Ret. Idx.	Conc. %	
5.856	Toluene	764	0.01%	IFRA
11.685	alpha-Thujene	924	0.08%	
12.084	alpha-Pinene	932	0.28%	
12.971	Camphene	948	0.01%	
14.228	Sabinene	971	4.52%	
14.519	beta-Pinene	977	0.78%	
15.144	Myrcene	988	0.47%	
16.052	Pseudolimonene	1004	0.03%	
16.226	alpha-Phellandrene	1007	14%	
16.343	delta-3-Carene	1008	0.16%	
16.847	alpha-Terpinene	1016	0.33%	
17.339	para-Cymene	1024	1.66%	
17.743	Limonene	1030	58.42%	IFRA
17.802	beta-Phellandrene	1031	0.83%	
17.848	1,8-Cineole	1032	0.28%	
18.023	cis-beta-Ocimene	1034	0.13%	
18.696	trans-beta-Ocimene	1045	0.14%	
19.315	Terpinene analogue	1054	0.01%	
19.466	gamma-Terpinene	1057	0.21%	
20.238	trans-Sabinene hydrate	1068	0.06%	
21.255	Terpinolene	1084	0.86%	
21.582	para-Cymenene	1089	0.01%	
22.203	Linalool	1099	0.02%	IFRA
22.285	Unidentified	1100	0.01%	
23.692	trans-para-Mentha-2,8-dienol	1121	0.02%	
23.880	cis-para-Menth-2-en-1-ol	1123	0.02%	
24.134	allo-Ocimene	1127	0.01%	
24.446	cis-Limonene oxide	1131	0.02%	
24.689	cis-para-Mentha-2,8-dien-1-ol	1135	0.02%	
24.725	trans-Limonene oxide	1136	0.01%	
25.110	Unidentified	1141	0.02%	
25.421	Camphor	1146	0.02%	
26.990	Unidentified	1169	0.03%	
27.124	Isoborneol	1170	0.01%	
27.268	Unidentified	1173	0.04%	
27.588	Unidentified	1177	0.01%	
27.727	Terpinen-4-ol	1179	0.27%	
28.160	para-Cymen-8-ol	1186	0.07%	
28.739	alpha-Terpineol	1194	1.53%	
29.068	Unidentified	1199	0.01%	



Ret. Time	Component	Ret. Idx.	Conc. %	
29.270	alpha-Phellandrene epoxide	1202	0.1%	
29.678	cis-Piperitol	1208	0.01%	
30.352	trans-Carveol	1218	0.02%	
30.624	Unidentified	1222	0.01%	
31.254	cis-Carveol	1231	0.02%	
31.805	Unidentified	1239	0.01%	
32.053	Carvone	1243	0.02%	IFRA
32.306	Unidentified	1246	0.01%	
32.380	Carvotanacetone	1247	0.01%	
32.711	Piperitone	1252	0.03%	
35.710	Carvacrol	1296	0.03%	
36.474	Unidentified	1308	0.01%	
37.122	Unidentified	1318	0.06%	
38.155	delta-Elemene	1334	0.01%	
38.927	alpha-Cubebene	1345	0.02%	
40.791	alpha-Copaene	1374	0.06%	
41.559	Unidentified	1386	0.02%	
41.689	beta-Elemene	1388	0.06%	
41.909	Unidentified	1391	0.03%	
42.367	Methyleugenol	1398	0.17%	IFRA
42.984	Unidentified	1408	0.01%	
43.581	beta-Caryophyllene	1417	0.17%	
44.212	gamma-Elemene	1427	0.01%	
45.410	Unidentified	1447	0.01%	
45.826	alpha-Humulene	1453	0.06%	
46.689	Unidentified	1467	0.01%	
47.414	Germacrene D	1479	0.05%	
48.035	Viridiflorene	1489	0.01%	
48.311	Valencene	1493	0.01%	
48.502	alpha-Murolene	1496	0.02%	
49.701	delta-Cadinene	1516	0.03%	
49.736	Unidentified	1517	0.05%	
51.432	Elemicin	1545	3.11%	
51.523	Elemol	1547	9.42%	
53.719	Unidentified	1584	0%	
54.309	Guaiol	1594	0.13%	
55.230	Unidentified	1610	0.01%	
56.312	gamma-Eudesmol	1629	0.2%	
56.976	Unidentified	1641	0.01%	
57.285	Unidentified	1647	0.01%	



Ret. Time	Component	Ret. Idx.	Conc. %	
57.601	alpha-Eudesmol	1652	0.39%	
58.185	Bulnesol	1663	0.03%	
63.703	Benzyl benzoate	1764	0.01%	IFRA
64.245	Unidentified	1774	0.01%	
65.142	Phellandrene dimer	1791	0.05%	
65.515	Unidentified	1798	0.01%	
66.285	Cryptomeridiol	1813	0.02%	
66.887	Unidentified	1825	0.03%	
95.625	Unidentified	2467	0.01%	

Total Identified Compounds **99.58 %**

