

## Sample:

---

Client: | Nature's Gift  
Sample: | Rosemary (Rosmarinus officinalis)  
Batch # | TU-20226  
CAS Number | 8000-25-7  
Type: | Essential Oil

---

## Conclusion:

- No adulterants, diluents, or contaminants were detected via this method.
- This oil meets the expected profile for genuine oil of Rosemary (Rosmarinus officinalis).

X



Validated By:



Essential Validation Services

747 SW 2nd Ave, Gainesville, FL 32601

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

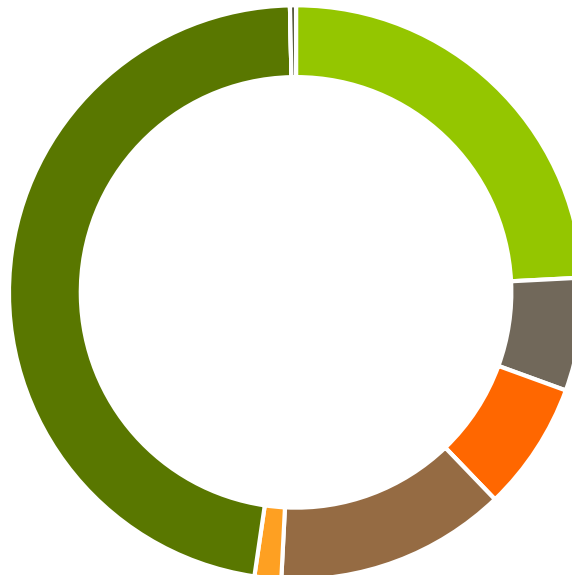
## Summary of Analyses

---

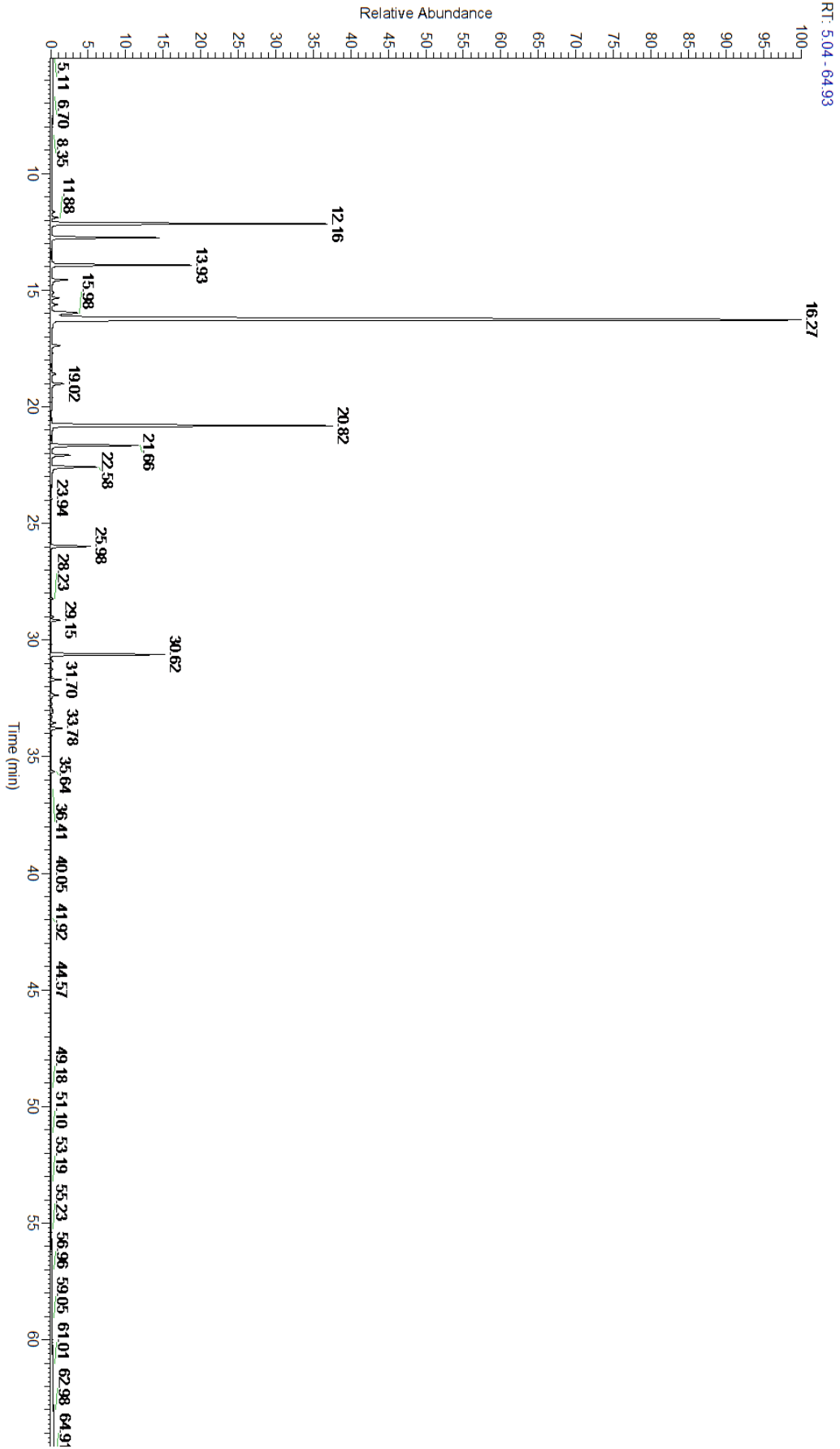
A fresh sample of Rosemary (Rosmarinus officinalis) (10 uL in .5to.5 mL Hexane + ETOH) was prepared and analyzed via split injection GC/EI-MS.

Main Compounds	Percentages
1,8-Cineole (Co-Eluting)	47.20%
Camphor	13.00%
alpha-Pinene	10.74%
beta-Pinene	5.28%
beta-Caryophyllene	4.44%
Camphene	4.09%
Borneol	3.70%
alpha-Terpineol	2.05%
para-Cymene	1.57%
Bornyl acetate	1.50%
Terpinen-4-ol	0.83%
Myrcene	0.76%
Linalool	0.59%

Monoterpenes	Sesquiterpenes	Monoterpenols	Sesquiterpenols	Ketones
24.18%	6.37%	7.27%	0.00%	13.00%
Esters	Ethers	Aldehydes	Phenols	Other
1.50%	47.34%	0.00%	0.00%	0.34%



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



Total Percentage		99.66%			
Peak Number	RT	Area %	Compound Name	RI	Chemical Family
1	11.64	0.12%	Tricyclene	923.00	Monoterpene
2	11.88	0.24%	alpha-Thujene	927.80	Monoterpene
3	12.16	10.74%	alpha-Pinene	936.10	Monoterpene
4	12.75	4.09%	Camphene	950.30	Monoterpene
5	12.99	0.02%	Thuja-2,4(10)-diene	953.00	Monoterpene
6	13.81	0.06%	Sabinene	973.00	Monoterpene
7	13.93	5.28%	beta-Pinene	974.00	Monoterpene
8	14.56	0.76%	Myrcene	989.20	Monoterpene
9	15.10	0.12%	alpha-Phellandrene	1002.00	Monoterpene
10	15.33	0.29%	delta-3-Carene	1008.00	Monoterpene
11	15.61	0.27%	alpha-Terpinene	1014.00	Monoterpene
12	15.98	1.57%	para-Cymene	1024.30	Monoterpene
13	16.27	47.20%	1,8-Cineole	1031.80	Monoterpene Ether
14	16.27	Co-Eluting	Limonene	1029.50	Monoterpene
15	17.37	0.39%	gamma-Terpinene	1054.00	Monoterpene
16	17.71	0.03%	trans-Sabinene hydrate	1072.00	Monoterpenol
17	18.59	0.23%	Terpinolene	1092.10	Monoterpene
18	19.02	0.59%	Linalool	1099.00	Monoterpenol
19	19.62	0.03%	endo-Fenchol	1114.00	Monoterpenol
20	20.64	0.02%	trans-Pinocarveol	1143.75	Monoterpenol
21	20.82	13.00%	Camphor	1147.55	Monoterpene Ketone
22	21.66	3.70%	Borneol	1168.71	Monoterpenol
23	22.07	0.83%	Terpinen-4-ol	1180.57	Monoterpenol
24	22.58	2.05%	alpha-Terpineol	1191.71	Monoterpenol
25	22.86	0.02%	gamma-Terpineol	1198.50	Monoterpenol
26	25.98	1.50%	Bornyl acetate	1288.29	Monoterpene Ester
27	28.23	0.05%	alpha-Cubebene	1355.71	Sesquiterpene
28	29.00	0.08%	alpha-Ylangene	1371.33	Sesquiterpene
29	29.15	0.33%	alpha-Copaene	1379.00	Sesquiterpene
30	30.62	4.44%	beta-Caryophyllene	1427.14	Sesquiterpene
31	30.90	0.06%	beta-Gurjunene	1433.00	Sesquiterpene
32	31.70	0.38%	alpha-Humulene	1461.43	Sesquiterpene
33	32.37	0.30%	gamma-Murolene	1478.86	Sesquiterpene
34	33.00	0.05%	alpha-Selinene	1492.50	Sesquiterpene
35	33.09	0.07%	alpha-Murolene	1500.25	Sesquiterpene
36	33.55	0.16%	gamma-Cadinene	1515.29	Sesquiterpene
37	33.78	0.45%	delta-Cadinene	1524.14	Sesquiterpene
38	35.64	0.14%	Caryophyllene oxide	1594.86	Sesquiterpene Ether