

Sample:

Client: | Nature's Gift
Sample: | Cistus (Cistus ladanifer)
Batch # | SP-23542
Cas Number | 8016-26-0
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 Cistus (Cistus ladanifer).

X



Validated By:



Essential Validation Services

747 SW 2nd Ave, Gainesville, FL 32601

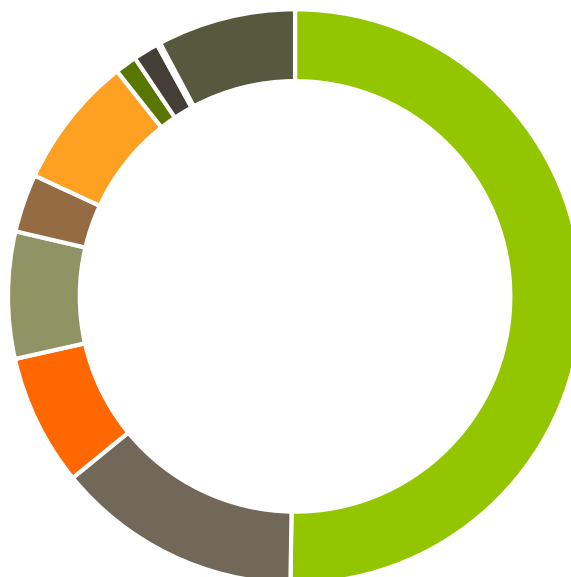
Phone: 317-361-5044 E-mail: Adam@essentialvalidationservices.com

Summary of Analyses

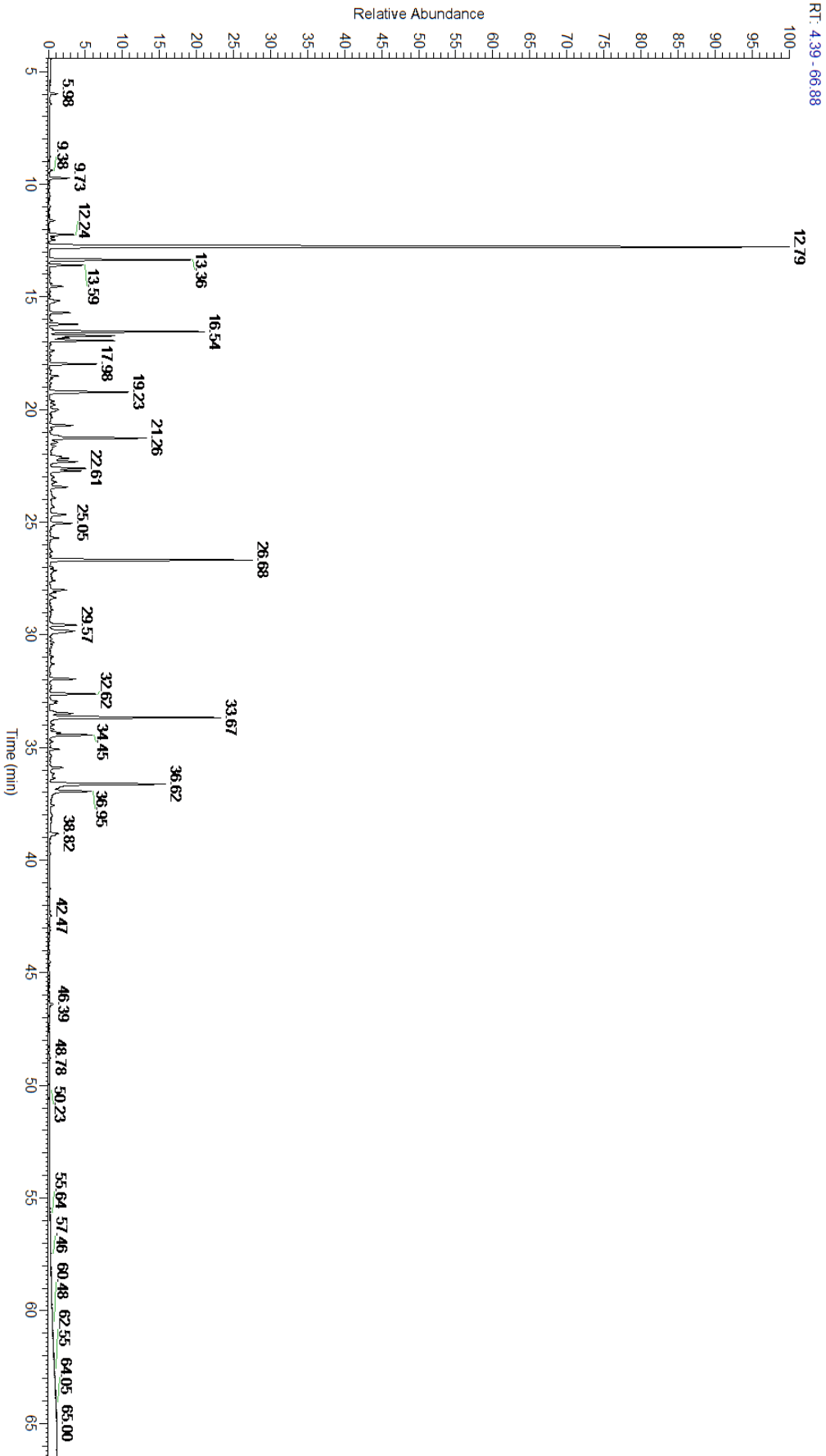
A fresh sample of Cistus (Cistus ladanifer) Essential Oil (10 uL in .5to.5 mL Hexane + ETOH) was prepared and analyzed via split injection GC/EI-MS.

Main Compounds	Percentages
alpha-Pinene	28.34%
Bornyl acetate	6.23%
Viridiflorene	5.84%
Viridiflorol	4.87%
para-Cymene	4.81%
Camphene	4.37%
trans-Pinocarveol	3.20%
Terpinolene	2.83%
Limonene (Co-Eluting)	2.14%
(Z)-beta-Ocimene	1.98%
Ledol	1.53%
9-epi-(E)-Caryophyllene	1.49%
gamma-Terpinene	1.47%

Monoterpenes	Sesquiterpenes	Monoterpenols	Sesquiterpenols	Ketones
50.26%	13.84%	7.40%	7.14%	3.27%
Esters	Ethers	Aldehydes	Phenols	Other
7.44%	1.23%	1.44%	0.19%	7.79%



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



Total Percentage		91.16%			
Peak Number	RT	Area %	Compound Name	RI	Chemical Family
1	5.98	0.21%	Dimethyl, 1,3-hexadiene<Z>	760.00	Alkadiene
2	6.43	0.05%	Toluene	765.00	Simple Phenolic
3	9.38	0.09%	trans-Salvene	847.50	Normonoterpene
4	9.73	0.58%	2,6-Dimethyl-1,5-heptadiene	855.00	Alkadiene
5	10.97	0.04%	Styrene	893.00	Phenylpropanoid
6	12.24	0.77%	Tricyclene	923.00	Monoterpene
7	12.47	0.18%	alpha-Thujene	927.80	Monoterpene
8	12.79	28.34%	alpha-Pinene	936.10	Monoterpene
9	13.21	0.01%	alpha-Fenchene	946.00	Monoterpene
10	13.36	4.37%	Camphene	950.30	Monoterpene
11	13.59	1.02%	Thuja-2,4(10)-diene	953.00	Monoterpene
12	14.41	0.08%	Sabinene	973.00	Monoterpene
13	14.54	0.41%	beta-Pinene	974.00	Monoterpene
14	15.17	0.52%	3-ethenyl-1,2-dimethyl-1,4-Cyclohexane		
15	15.71	0.67%	alpha-Phellandrene	1002.00	Monoterpene
16	16.21	0.85%	alpha-Terpinene	1014.00	Monoterpene
17	16.54	4.81%	para-Cymene	1024.30	Monoterpene
18	16.73	2.14%	Limonene	1029.50	Monoterpene
19	16.73	Co-Eluting	beta-Phellandrene	1030.00	Monoterpene
20	16.83	0.55%	1,8-Cineole	1031.80	Monoterpene Ether
21	16.94	1.98%	(Z)-beta-Ocimene	1037.80	Monoterpene
22	17.98	1.47%	gamma-Terpinene	1054.00	Monoterpene
23	18.27	0.10%	Acetophenone	1061.00	Simple Phenolic
24	19.23	2.83%	Terpinolene	1092.10	Monoterpene
25	19.62	0.16%	para-Cymenene	1092.43	Monoterpene
26	19.78	0.25%	Linalool	1099.00	Monoterpenol
27	20.00	0.46%	cis-Rose oxide	1110.00	Monoterpene Ether
28	20.70	0.78%	alpha-Campholenal	1125.29	Monoterpene Aldehyde
29	21.17	0.25%	3-nonen-2-one	1137.86	Monoterpenol
30	21.26	3.20%	trans-Pinocarveol	1143.75	Monoterpenol
31	21.45	0.36%	Camphor	1147.55	Monoterpene Ketone
32	22.08	0.31%	Isoborneol	1159.70	Monoterpenol
33	22.15	0.69%	Pinocarvone	1161.43	Monoterpene Ketone
34	22.31	1.03%	Borneol	1168.71	Monoterpenol
35	22.61	1.24%	Isopinocampone	1172.00	Monoterpene Ketone
36	22.72	1.05%	Terpinen-4-ol	1180.57	Monoterpenol
37	23.00	0.17%	UK Cistus		
38	23.21	0.26%	alpha-Terpineol	1191.71	Monoterpenol
39	23.44	0.62%	Myrtenal	1200.43	Monoterpene Aldehyde
40	23.92	0.16%	Verbenone	1213.80	Monoterpene Ketone
41	24.32	0.17%	beta-Cyclocitral	1221.00	Monoterpene
42	24.66	0.71%	(E)-Ocimenone	1239.00	Monoterpene Ketone
43	25.05	0.76%	cis-Isogeraniol	1252.00	Monoterpenol

44	25.15	0.11%	Carvone	1248.14	Monoterpene Ketone
45	25.70	0.29%	Geraniol	1255.29	Monoterpenol
46	26.30	0.12%	UK Cistus		
47	26.68	6.23%	Bornyl acetate	1288.29	Monoterpene Ester
48	27.03	0.11%	3-Thujanol acetate		
49	27.14	0.22%	trans-Pinocarvyl acetate	1305.00	Monoterpene Ether
50	28.01	0.53%	Myrtenyl acetate	1329.00	Monoterpene Ester
51	28.11	0.19%	neo-Verbanol acetate		
52	28.36	0.27%	trans-Carvyl acetate	1339.00	Monoterpene Ester
53	28.89	0.09%	alpha-Cubebene	1355.71	Sesquiterpene
54	29.57	1.15%	alpha-Ylangene	1371.33	Sesquiterpene
55	29.83	0.90%	alpha-Copaene	1379.00	Sesquiterpene
56	29.89	0.41%	Geranyl acetate	1379.20	Monoterpene Ester
57	30.55	0.04%	Dodecanal	1397.80	Aliphatic Aldehyde
58	30.96	0.11%	alpha-Gurjunene	1412.00	Sesquiterpene
59	31.29	0.14%	beta-Caryophyllene	1427.14	Sesquiterpene
60	31.96	0.88%	Aromadendrene	1449.80	Sesquiterpene
61	32.25	0.07%	cis-Muurola-3,5-diene	1456.75	Sesquiterpene
62	32.62	1.49%	9-epi-(E)-Caryophyllene	1449.50	Sesquiterpene
63	33.49	0.95%	gamma-Gurjunene	1473.17	Sesquiterpene
64	33.67	5.84%	Viridiflorene	1494.14	Sesquiterpene
65	34.34	0.34%	gamma-Cadinene	1515.29	Sesquiterpene
66	34.45	1.45%	delta-Cadinene	1524.14	Sesquiterpene
67	35.08	0.31%	alpha-Calacorene	1537.14	Sesquiterpene
68	35.89	0.46%	Palustrol	1581.50	Sesquiterpenol
69	36.62	4.87%	Viridiflorol	1596.00	Sesquiterpenol
70	36.95	1.53%	Ledol	1623.00	Sesquiterpenol
71	38.82	0.28%	Valerianol	1655.30	Sesquiterpenol
72	38.89	0.12%	Cadalene	1666.00	Sesquiterpene