



JADE BLOOM

HEALTH, HEALING & HAPPINESS
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GC/MS & COA

Caraway – 00999173

September 1, 2018

ANALYSIS

Type: Essential oil

Source : Carum carvi

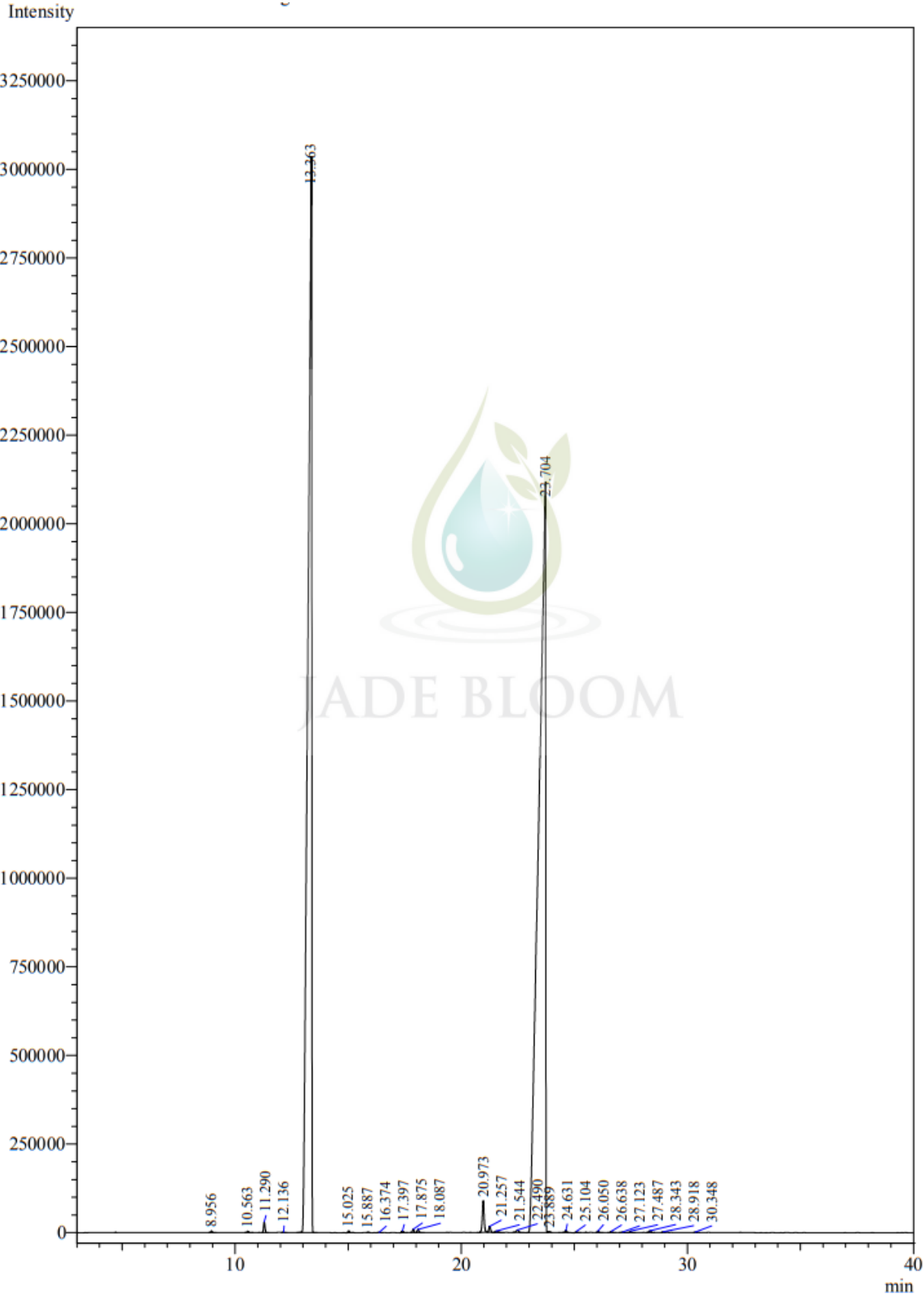
Analysis date: September 1, 2018

Physical aspect: Pale yellow to brownish amber liquid

CONCLUSION

No adulterant, contaminant or diluent has been detected using this method.

Physico-Chemical Properties	Specifications	Results
<u>Specific Gravity at 20° C</u>	0.901 – 0.920	Complies
<u>Refractive Index at 20° C</u>	1.485 – 1.492	Complies
<u>Optical Rotation at 20° C</u>	+70 – +80	Complies



Peak#	Ret.Time	Area	Area%	Name
1	8.956	18302	0.0226	Alpha-pinene
2	10.563	17347	0.0214	Sabinene
3	11.290	128937	0.1589	Myrcene
4	12.136	6305	0.0078	Delta-3-carene
5	13.363	35487044	43.7449	Limonene
6	15.025	25630	0.0316	1-Octanol
7	15.887	6521	0.0080	Cymenene para
8	16.374	5355	0.0066	Linalool
9	17.397	30557	0.0377	Mentha-2,8-dien-1-ol trans-para
10	17.875	43309	0.0534	Limonene epoxide
11	18.087	46270	0.0570	Trans-Limonene oxide
12	20.973	505065	0.6226	Carvone (Z)-dihydro
13	21.257	87399	0.1077	Carvone (E)- dihydro
14	21.544	43493	0.0536	4-Trichloroacetyloxyimino-2-carene
15	22.490	52720	0.0650	2-Hydroxycineol
16	23.704	44425313	54.7631	Carvone
17	23.889	10373	0.0128	Carvenone
18	24.631	38503	0.0475	Trans-Carvone oxide
19	25.104	18208	0.0224	Trans-Anethole
20	26.050	24015	0.0296	Mentha-2,8-dien-1-ol trans- p
21	26.638	19853	0.0245	Mentha-2,8-dien-1-ol cis-para
22	27.123	9433	0.0116	Beta-citral
23	27.487	21909	0.0270	3-Isopropylidene-5-methyl-hex-4-en-2-one
24	28.343	36540	0.0450	Mentha-1(7),8-dien-2-ol cis-para
25	28.918	9331	0.0115	Mentha-1(7),8-dien-2-ol trans-para
26	30.348	4989	0.0061	cis-p-mentha-1(7),8-dien-2-ol
Total		81122721	100.0000	

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