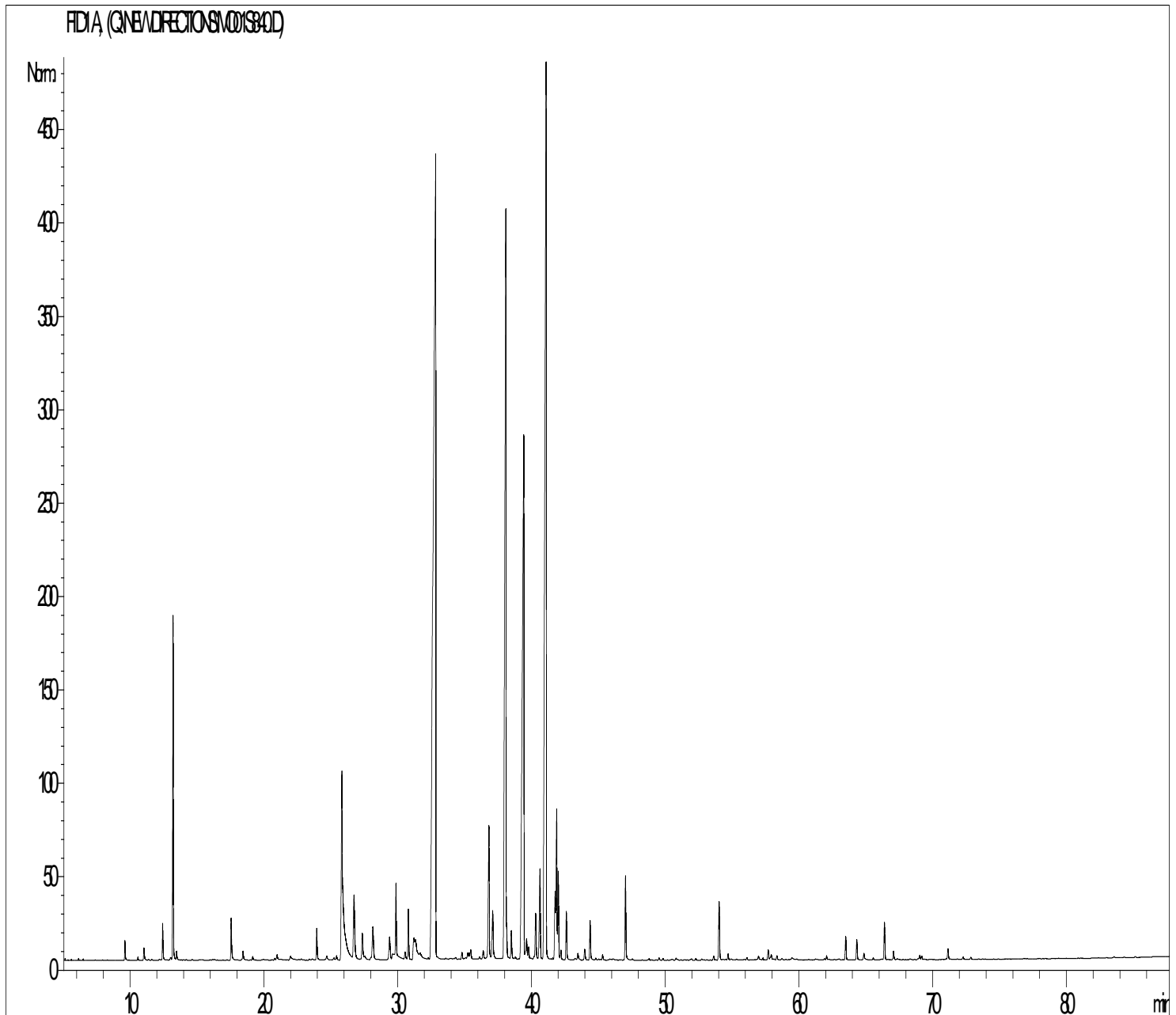




GCMS ANALYSIS

PRODUCT NAME: MELISSA LEAF (BULGARIA) ESSENTIAL OIL - 11326

DATE: September 4, 2018



Due to volume turnover, this report is not lot specific. It is representative of the quality of this oil produced by the manufacturer of this product. Specific lots may vary slightly as is the case in natural products.

GCMS ANALYSIS (cont'd.)

PRODUCT NAME: MELISSA LEAF (BULGARIA) ESSENTIAL OIL - 11326

Peak	RT (min)	Compound	%
1	4,8	BUTANAL, 2-METHYL-	0,03
2	5,0	ISOVALERALDEHYDE	0,05
3	5,1	FURAN,2 -ETHYL-	0,02
4	6,1	alpha-PINENE	0,01
5	6,5	2,5-DIETHYLTETRAHYDROFURANE	0,01
6	9,6	beta-MYRCENE	0,16
7	10,6	1,8-CINEOLE, 2,3-DEHYDRO-	0,03
8	11,0	LIMONENE	0,13
9	11,4	Cis-ARBUSCULON	0,02
10	11,6	1,3,8-p-MENTHATRIENE	0,02
11	12,2	FURAN, 2-PENTYL	0,02
12	12,4	Cis-beta-OCIMENE	0,32
13	12,9	gamma-TERPINENE	0,01
14	13,0	MENTHATRIENE ISOMER	0,03
15	13,2	Trans-beta-OCIMENE	2,81
16	13,5	3-OCTANONE	0,10
17	14,2	HEXYL ACETATE	0,01
18	14,6	TERPINOLENE	0,01
19	16,1	3-HEXEN-1-OL ACETATE	0,01
20	16,3	TRIDECANE	0,01
21	17,5	6-METHYL-5-HEPTEN-2-ONE	0,45
22	18,3	1-HEXANOL	0,02
23	18,4	ROSE Cis-OXIDE	0,11
24	19,2	ROSE Trans-OXIDE	0,04
25	20,8	3-OCTANOL	0,02
26	20,9	NONANAL	0,03
27	21,0	GALBANOLENE	0,06
28	22,0	PHOTOCITRAL ISOMER	0,10
29	22,8	Cis-p-MENTHANE-8-OL	0,02
30	23,4	alpha-p-DIMETHYLSTYRENE	0,02

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GCMS ANALYSIS (cont'd.)
PRODUCT NAME: MELISSA LEAF (BULGARIA) ESSENTIAL OIL - 11326

Peak	RT (min)	Compound	%
31	23,6	LINALOOL Cis-OXIDE	0,03
32	23,9	1-OCTEN-3-OL	0,33
33	24,7	alpha-CUBEBENE	0,08
34	25,2	NERYL OXIDE	0,03
35	25,4	AROMATIC COMPOUND	0,06
36	25,8	CITRONELLAL	4,66
37	26,7	alpha-COPAENE	1,02
38	27,3	EPIPHOTOCITRAL	0,43
39	27,6	alpha-BOURBONENE	0,09
40	28,0	BENZALDEHYDE	0,05
41	28,1	beta-BOURBONENE	0,59
42	29,4	beta1-CUBEBENE	0,43
43	29,5	PHOTOCITRAL A	0,66
44	29,9	LINALOOL	0,70
45	30,5	ISOPULEGOL	0,08
46	30,8	METHYL CITRONELLATE	0,52
47	31,2	PHOTOCITRAL B	1,15
48	31,3	COMPOUND Mw=152	0,14
49	31,6	SESQUITERPENE	0,05
50	32,3	beta-ELEMENE	0,02
51	32,8	beta-CARYOPHYLLENE	26,06
52	32,9	LAVANDULYL ACETATE	0,07
53	33,5	SESQUITERPENE	0,02
54	33,9	SESQUITERPENE	0,03
55	34,3	AROMATIC COMPOUND	0,03
56	34,8	CADINA-3,5-DIENE	0,08
57	35,2	SESQUITERPENE	0,08
58	35,3	SESQUITERPENE	0,08
59	35,5	ALLO-AROMADENDRENE	0,10
60	36,1	2,6-DIMETHYL-5-HEPTEN-1-OL	0,02

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GCMS ANALYSIS (cont'd.)
PRODUCT NAME: MELISSA LEAF (BULGARIA) ESSENTIAL OIL - 11326

Peak	RT (min)	Compound	%
61	36,4	ZONARENE	0,11
62	36,8	alpha-HUMULENE	1,73
63	37,1	E-beta-FARNESENE + Cis-4,5-MUUROLADIENE	0,66
64	38,0	NERAL	13,76
65	38,2	gamma-MUUROLENE	0,27
66	38,5	METHYL GERANATE	0,41
67	38,8	alpha-TERPINEOL	0,08
68	39,4	GERMACRENE D	11,49
69	39,6	CADINENE ISOMER	0,41
70	39,8	SESQUITERPENE	0,18
71	40,2	alpha-SELINENE	0,10
72	40,3	alpha-MUUROLENE	0,62
73	40,6	NERYL ACETATE	1,29
74	41,1	GERANIAL	17,34
75	41,7	alpha-FARNESENE	0,73
76	41,8	delta-CADINENE	1,83
77	42,0	gamma-CADINENE	1,04
78	42,2	METHYL SALICYLATE	0,15
79	42,6	CITRONELLOL	0,55
80	43,2	TERPENIC ALCOHOL	0,03
81	43,5	CADINA-1,4-DIENE	0,11
82	43,9	alpha-AMORPHENE	0,14
83	44,4	NEROL	0,45
84	44,8	Cis-ISOGERANIOL	0,03
85	45,0	Trans-ISOGERANIOL	0,02
86	45,3	beta-DAMASCENONE	0,07
87	45,8	E,E-2,6-DIMETHYL-3,5,7-OCTATRIENE-2-OL	0,02
88	46,1	CALAMENENE	0,03
89	47,0	GERANIOL	0,97
90	47,5	E-GERANYL ACETONE	0,02

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GCMS ANALYSIS (cont'd.)
PRODUCT NAME: MELISSA LEAF (BULGARIA) ESSENTIAL OIL - 11326

Peak	RT (min)	Compound	%
91	48,8	AROMATIC COMPOUND	0,02
92	49,5	épi-CUBEBOL	0,03
93	49,8	AROMATIC COMPOUND	0,02
94	50,8	HUMULENE OXIDE	0,04
95	51,9	beta-IONONE	0,02
96	52,2	CUBEBOL	0,02
97	53,6	ISOCARYOPHYLLENE OXIDE	0,05
98	54,0	CARYOPHYLLENE OXIDE	0,71
99	54,7	SESQUITERPENOL	0,06
100	56,1	AROMATIC COMPOUND	0,03
101	57,0	Epoxy-6,7-HUMULENE	0,05
102	57,3	NEROLIDOL	0,02
103	57,7	GERMACRA-1,5-DIEN-4-OL	0,12
104	57,9	Epi-CUBENOL + LEVOJUNENOL	0,09
105	58,1	SESQUITERPENOL	0,01
106	58,3	CUBENOL	0,05
107	58,7	TERPENIC KETONE	0,02
108	62,1	TRIMETHYL PENTADECANONE	0,05
109	63,0	EUGENOL	0,03
110	63,5	T-CADINOL	0,20
111	63,6	FOKIENOL	0,06
112	64,3	alpha-MUUROLOL	0,23
113	64,8	delta-CADINOL	0,08
114	65,5	GERANYL-alpha-TERPINENE	0,02
115	66,4	alpha-CADINOL	0,44
116	67,1	CITRONELIC ACID	0,10
117	67,3	SESQUITERPENOL	0,02
118	68,3	SESQUITERPENIC OXIDE	0,02
119	68,9	SESQUITERPENIC OXIDE	0,02
120	69,0	NERIC ACID	0,06

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GCMS ANALYSIS (cont'd.)

PRODUCT NAME: MELISSA LEAF (BULGARIA) ESSENTIAL OIL - 11326

Peak	RT (min)	Compound	%
121	69,2	CARYOPHYLLA-3,7-DIEN-6-OL	0,05
122	71,0	SESQUITERPENIC OXIDE	0,01
123	71,2	GERANIC ACID	0,14
124	72,2	SESQUITERPENIC OXIDE	0,03
125	72,9	SESQUITERPENIC OXIDE	0,03
		TOTAL	99,96

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