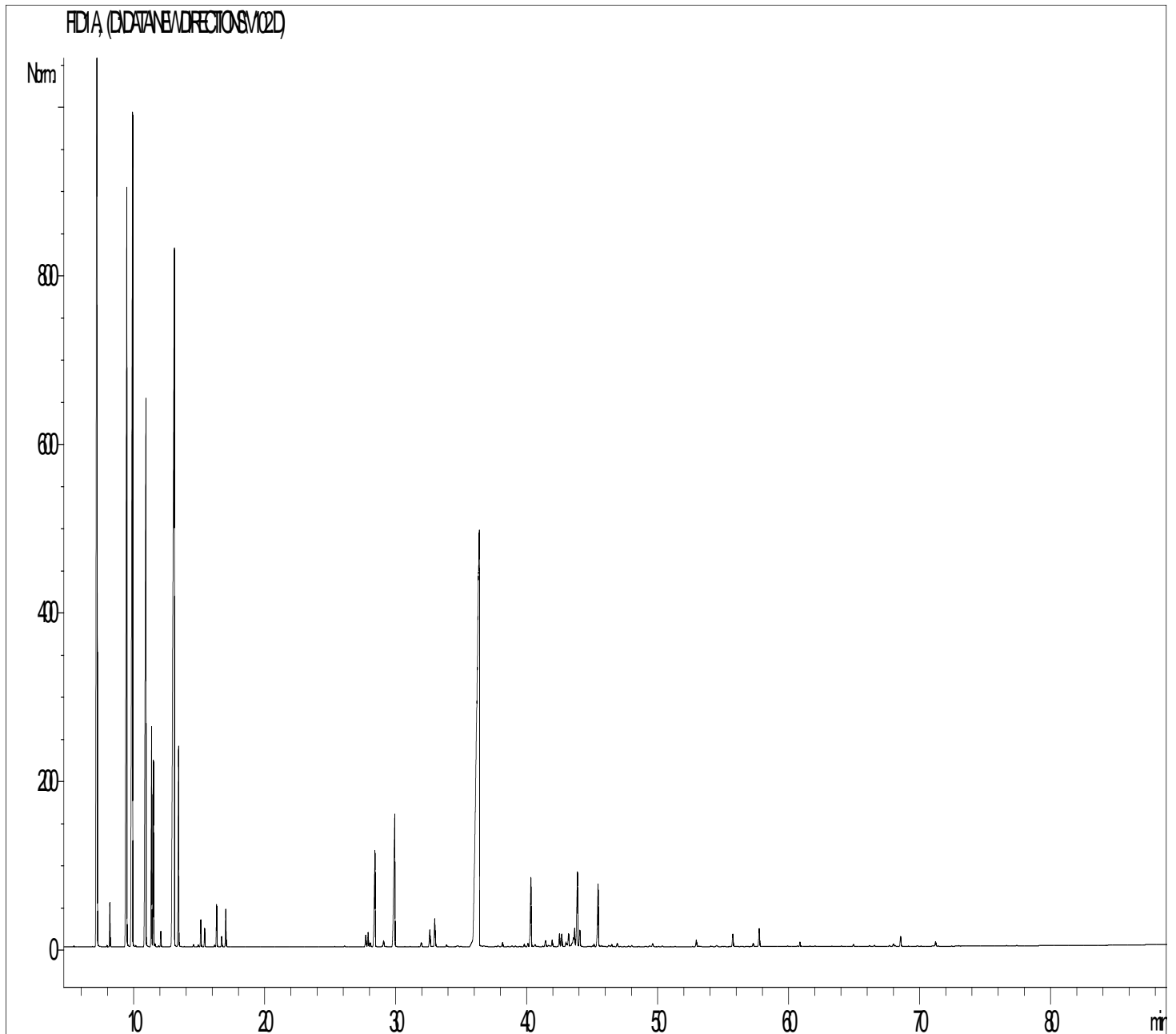




GCMS ANALYSIS

PRODUCT NAME: PEPPER BLACK ORGANIC ESSENTIAL OIL - 50020

DATE: January 3, 2019



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: PEPPER BLACK ORGANIC ESSENTIAL OIL - 50020

Peak	RT (min)	Compound name	%
1	6,8	TRICYCLEN	0,01
2	7,2	alpha-PINENE	13,97
3	7,3	alpha-THUYENE	1,23
4	7,9	alpha-FENCHENE	0,01
5	8,2	CAMPHENE	0,37
6	9,5	beta-PINENE	11,58
7	9,9	SABINENE	12,38
8	10,2	PINADIENE	0,01
9	10,9	delta3-CARENE	7,94
10	11,4	beta-MYRCENE	2,16
11	11,5	alpha-PHELLANDRENE	1,56
12	11,6	psi-LIMONENE	0,02
13	11,9	o-CYMENE	0,01
14	12,1	alpha-TERPINENE	0,14
15	12,5	ISOSYLVESTRENE	0,01
16	13,1	LIMONENE	15,30
17	13,4	beta-PHELLANDRENE	2,03
18	14,6	Cis-beta-OCIMENE	0,02
19	14,9	TERPENE ISOMER	0,02
20	15,1	gamma-TERPINENE	0,26
21	15,4	Trans-beta-OCIMENE	0,18
22	16,2	m-CYMENE	0,02
23	16,3	p-CYMENE	0,42
24	16,7	ISOTERPINOLENE	0,11
25	17,0	TERPINOLENE	0,38
26	26,1	alpha,p-DIMETHYLSTYRENE	0,01
27	27,7	alpha-CUBEBENE	0,17
28	27,9	Trans-THUYANOL	0,17
29	28,1	ELEMENE ISOMER	0,06
30	28,4	delta-ELEMENE	1,44

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GCMS ANALYSIS (cont'd.)

PRODUCT NAME: PEPPER BLACK ORGANIC ESSENTIAL OIL - 50020

Peak	RT (min)	Compound name	%
31	29,1	CYCLOSATIVENE	0,08
32	29,9	alpha-COPAENE	2,44
33	31,1	TERPENIC EPOXIDE	0,01
34	31,9	alpha-GURJUNENE	0,07
35	32,6	beta1-CUBEBENE	0,25
36	32,8	Cis-THUYANOL	0,01
37	33,0	LINALOOL	0,39
38	33,9	Trans-p-MENTH-2-EN-1-OL	0,03
39	34,7	SESQUITERPENE	0,02
40	35,8	beta-ELEMENE	0,13
41	36,4	beta-CARYOPHYLLENE	18,36
42	36,7	TERPINENE-4-OL	0,03
43	37,0	AROMADENDRENE	0,01
44	37,6	MYRTENAL	0,01
45	37,8	Cis-p-MENTH-2-EN-1-OL	0,02
46	38,2	CADINA-3,5-DIENE	0,06
47	38,9	GERMACRENE A	0,02
48	39,1	Trans-PINOCARVEOL	0,01
49	39,5	ALLO-AROMADENDRENE	0,01
50	39,8	ZONARENE	0,04
51	40,1	SESQUITERPENE	0,04
52	40,3	alpha-HUMULENE	0,88
53	40,4	E-beta-FARNESENE	0,10
54	40,6	Cis-4,5-MUUROLADIENE	0,03
55	41,2	SESQUITERPENE	0,01
56	41,4	gamma-MUUROLENE	0,10
57	41,7	SESQUITERPENE	0,02
58	41,8	CALARENE	0,01
59	41,9	alpha-TERPINEOL + LEDENE	0,10
60	42,5	GURJUNENE ISOMER	0,17

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GCMS ANALYSIS (cont'd.)

PRODUCT NAME: PEPPER BLACK ORGANIC ESSENTIAL OIL - 50020

Peak	RT (min)	Compound name	%
61	42,7	GERMACRENE D	0,17
62	43,0	CADINADIENE ISOMER	0,07
63	43,2	beta-SELINENE	0,18
64	43,4	MUUROLENE ISOMERE	0,02
65	43,5	Alpha-ZINGIBERENE	0,04
66	43,6	alpha-SELINENE	0,11
67	43,7	alpha-MUUROLENE	0,26
68	43,9	beta-BISABOLENE	1,14
69	44,1	BICYCLOGERMACRENE	0,23
70	44,7	Trans-PIPERITOL	0,01
71	45,0	SESQUITERPENE	0,01
72	45,1	alpha-FARNESENE	0,03
73	45,5	delta-CADINENE	0,93
74	45,7	gamma-CADINENE	0,01
75	45,8	TERPENIC COMPOUND	0,01
76	46,3	beta-SEQUIPELLANDRENE	0,02
77	46,4	Alpha-CURCUMENE	0,01
78	46,5	alpha-BISABOLENE	0,02
79	46,9	CADINA-1,4-DIENE	0,05
80	47,2	MYRTENOL	0,01
81	47,8	NEROL	0,01
82	48,0	SABINOL ISOMER	0,02
83	48,6	2,4-DECADIENAL	0,01
84	49,4	GERMACRENE B	0,02
85	49,6	CALAMENENE	0,05
86	50,1	m-CYMENE-8-OL	0,01
87	50,4	p-CYMENE-8-OL	0,01
88	53,0	Épi-CUBEBOL	0,09
89	53,1	SESQUITERPENOL	0,01
90	54,1	Alpha-CALACORENE	0,01

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GCMS ANALYSIS (cont'd.)

PRODUCT NAME: PEPPER BLACK ORGANIC ESSENTIAL OIL - 50020

Peak	RT (min)	Compound name	%
91	54,5	HUMULENE EPOXIDE	0,02
92	55,7	CUBEBOL	0,17
93	57,3	ISOCARYOPHYLLENE EPOXIDE	0,05
94	57,8	CARYOPHYLLENE EPOXIDE	0,26
95	59,9	SESQUITERPENOL	0,01
96	60,7	EPOXY-6,7-HUMULENE	0,01
97	60,9	NEROLIDOL	0,05
98	61,6	Epi-CUBENOL	0,01
99	62,0	CUBENOL	0,01
100	62,8	GLOBULOL	0,01
101	63,0	ELEMOL	0,01
102	63,3	GUAIOL	0,01
103	64,0	SESQUITERPENIC EPOXIDE	0,01
104	65,0	SPATHULENOL	0,03
105	66,2	SESQUITERPENOL	0,01
106	66,5	EUGENOL	0,02
107	67,7	BISABOLOL ISOMER	0,01
108	68,0	alpha-MUUROLOL	0,03
109	68,1	ACETOXY KETONE COMPOUND	0,01
110	68,6	delta-CADINOL	0,14
111	69,8	SESQUITERPENOL	0,01
112	71,2	beta-NOOTKATOL	0,07
113	73,0	CARYOPHYLLA-3,7-DIEN-6-OL	0,01
		TOTAL	99,99

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