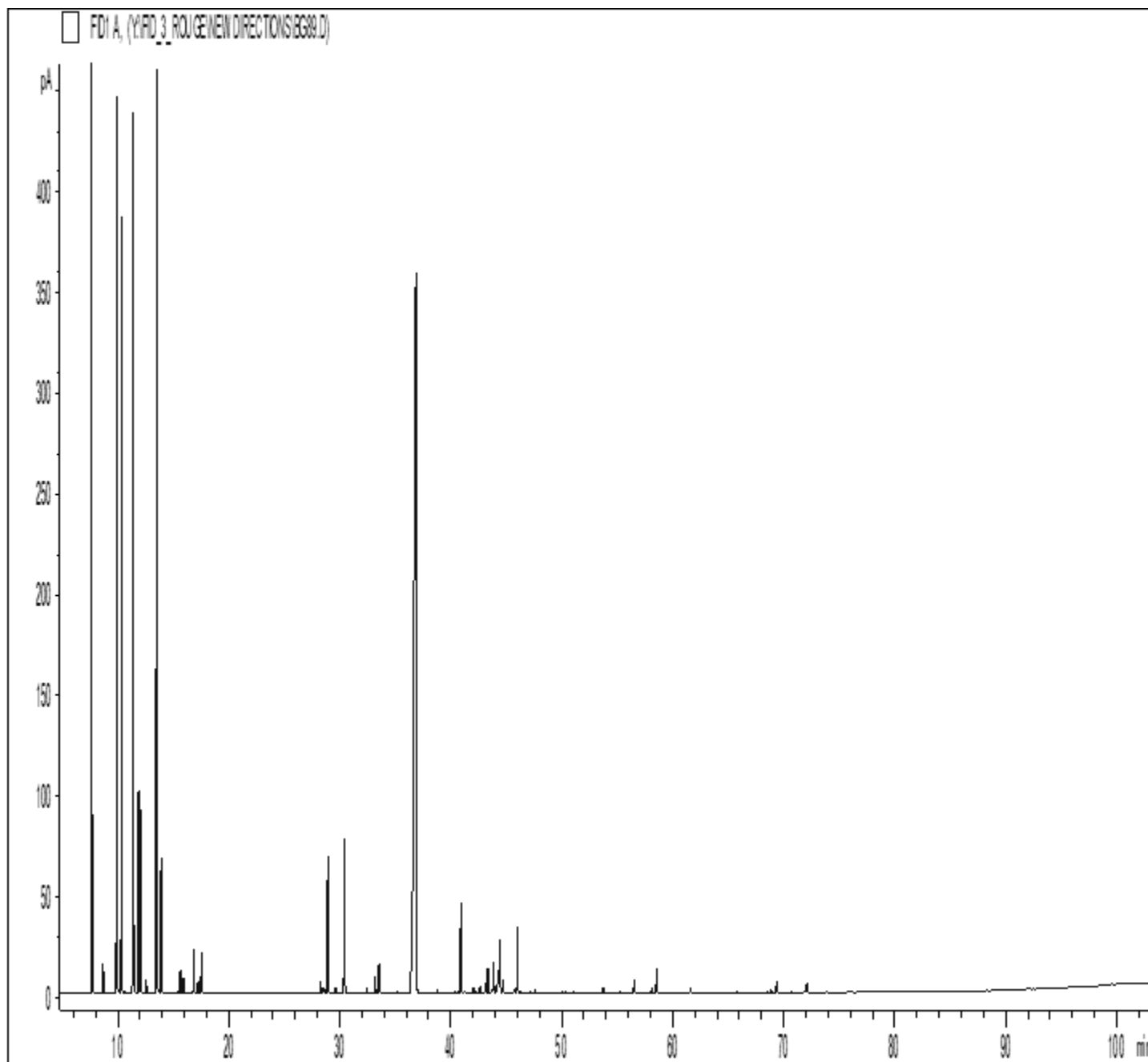


GCMS ANALYSIS

PRODUCT NAME: PEPPER BLACK ESSENTIAL OIL – 11111

DATE: October 02, 2020



*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 ESSENTIAL OIL – 11111

Peak	RT (min)	Compound name	%
1	4,65	ACETONE	0,01
2	5,67	BUTANAL 2-METHYL-	0,01
3	5,72	ISOVALERALDEHYDE	0,01
4	7,56	TRICYCLEN	0,01
5	8,00	<b>alpha-PINENE</b>	<b>9,25</b>
6	8,05	alpha-THUYENE	0,94
7	9,05	alpha-FENCHENE	0,01
8	9,34	CAMPHENE	0,25
9	10,99	<b>beta-PINENE</b>	<b>9,17</b>
10	11,52	<b>SABINENE</b>	<b>7,50</b>
11	11,90	delta2-CARENE	0,01
12	12,85	<b>delta3-CARENE</b>	<b>10,78</b>
13	13,42	beta-MYRCENE	1,81
14	13,55	alpha-PHELLANDRENE	1,69
15	13,64	psi-LIMONENE	0,02
16	13,71	TERPENIC COMPOUND	0,02
17	14,06	o-CYMENE	0,02
18	14,24	alpha-TERPINENE	0,14
19	15,17	ISOSYLVESTRENE	0,02
20	15,43	<b>LIMONENE</b>	<b>14,15</b>
21	15,68	1,8-CINEOLE	0,03
22	15,81	beta-PHELLANDRENE	1,30
23	17,25	cis-beta-OCIMENE	0,02
24	17,67	TERPENE ISOMER	0,03
25	17,90	gamma-TERPINENE	0,27
26	18,25	trans-beta-OCIMENE	0,15
27	19,21	m-CYMENE	0,04
28	19,37	p-CYMENE	0,62
29	19,80	ISOTERPINOLENE	0,15
30	20,15	TERPINOLENE	0,47

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GCMS ANALYSIS (cont'd.)

PRODUCT NAME: PEPPER BLACK ESSENTIAL OIL – 11111

Peak	RT (min)	Compound name	%
31	29,97	alpha-p-DIMETHYLSTYRENE	0,02
32	31,34	alpha-CUBEBENE	0,18
33	31,56	trans-THUYANOL	0,07
34	31,81	ELEMENE ISOMER	0,08
35	32,17	<b>delta-ELEMENE</b>	<b>1,89</b>
36	32,86	CYCLOSATIVENE	0,09
37	32,92	ISOLEDENE	0,03
38	33,21	YLANGENE	0,01
39	33,65	<b>alpha-COPAENE</b>	<b>2,35</b>
40	34,83	CAMPHOR	0,01
41	35,97	alpha-GURJUNENE	0,11
42	36,51	beta1-CUBEBENE	0,23
43	36,67	SESQUITERPENE	0,02
44	36,91	cis-THUYANOL	0,06
45	36,97	LINALOOL	0,40
46	37,62	PINOCARVONE	0,01
47	37,84	trans-p-MENTH-2-EN-1-OL	0,02
48	38,12	METHYL CITRONELLATE	0,01
49	38,80	epsilon-CADINENE	0,06
50	39,08	ELEMENE ISOMER	0,03
51	40,07	<b>beta-ELEMENE</b>	<b>0,71</b>
52	40,60	<b>beta-CARYOPHYLLENE</b>	<b>26,63</b>
53	40,82	TERPINENE-4-OL	0,01
54	40,90	6,9-GUAIADIENE	0,01
55	41,25	AROMADENDRENE	0,01
56	41,75	MYRTENAL	0,01
57	41,92	cis-p-MENTH-2-EN-1-OL	0,03
58	42,03	SESQUITERPENE	0,01
59	42,34	CADINA-3,5-DIENE	0,06
60	42,75	GERMACRENE A	0,01

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GCMS ANALYSIS (cont'd.)

PRODUCT NAME: PEPPER BLACK ESSENTIAL OIL – 11111

Peak	RT (min)	Compound name	%
61	43,13	ALLO-AROMADENDRENE	0,01
62	43,58	trans-PINOCARVEOL	0,02
63	43,76	GURJUNENE ISOMER	0,02
64	44,09	ZONARENE	0,03
65	44,32	SESQUITERPENE	0,04
66	44,53	E-beta-FARNESENE	0,10
67	44,65	alpha-HUMULENE	1,31
68	44,95	SESQUITERPENE	0,05
69	45,57	cis-PIPERITOL	0,01
70	45,78	gamma-MUUROLENE	0,10
71	45,85	CALARENE	0,03
72	46,06	LEDENE	0,02
73	46,16	alpha-TERPINEOL	0,15
74	46,82	GURJUNENE ISOMER	0,14
75	46,97	<b>GERMACRENE D</b>	<b>0,38</b>
76	47,27	SESQUITERPENE	0,06
77	47,42	MUUROLADIENE ISOMER	0,05
78	47,58	<b>beta-SELINENE</b>	<b>0,68</b>
79	47,73	PIPERITONE	0,03
80	47,90	<b>alpha-SELINENE</b>	<b>0,49</b>
81	47,94	alpha-MUUROLENE	0,15
82	48,12	beta-BISABOLENE	0,68
83	48,44	BICYCLOGERMACRENE	0,20
84	49,02	SESQUITERPENE	0,01
85	49,39	E,E-alpha-FARNESENE	0,06
86	49,91	delta-CADINENE	0,92
87	50,15	gamma-CADINENE	0,05
88	50,58	beta-SESQUIPELLANDRENE	0,01
89	50,84	alpha-CURCUMENE	0,03
90	51,28	CADINA-1,4-DIENE	0,05

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GCMS ANALYSIS (cont'd.)

PRODUCT NAME: PEPPER BLACK ESSENTIAL OIL – 11111

Peak	RT (min)	Compound name	%
91	51,42	trans-alpha-BISABOLENE	0,02
92	51,72	MYRTENOL	0,01
93	52,17	NEROL	0,01
94	52,56	trans-SABINOL	0,03
95	53,92	GERMACRENE B	0,04
96	54,16	CALAMENENE	0,06
97	54,68	m-CYMENE-8-OL	0,01
98	54,95	p-CYMENE-8-OL	0,02
99	55,85	cis-CARVEOL	0,01
100	57,08	epi-CUBEBOL	0,10
101	57,51	alpha-CALACORENE	0,01
102	58,72	HUMULENE EPOXIDE	0,02
103	58,97	SESQUITERPENIC EPOXIDE	0,05
104	59,91	CUBEBOL	0,21
105	61,76	ISOCARYOPHYLLENE EPOXIDE	0,13
106	62,27	<b>CARYOPHYLLENE EPOXIDE</b>	<b>0,58</b>
107	64,36	epoxy-6,7-HUMULENE	0,01
108	65,21	NEROLIDOL	0,10
109	66,51	CUBENOL	0,02
110	69,42	SPATHULENOL	0,05
111	70,68	beta-COPAEN-4-alpha-OL	0,02
112	72,13	beta-BISABOLOL	0,02
113	72,53	alpha-MUUROLOL	0,04
114	72,79	ACETOXY KETONE COMPOUND	0,03
115	73,11	delta-CADINOL	0,18
116	75,78	beta-NOOTKATOL	0,20
117	77,75	CARYOPHYLLA-2,6-DIEN-5-alpha-OL	0,03
		<b>TOTAL</b>	<b>99,96</b>

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