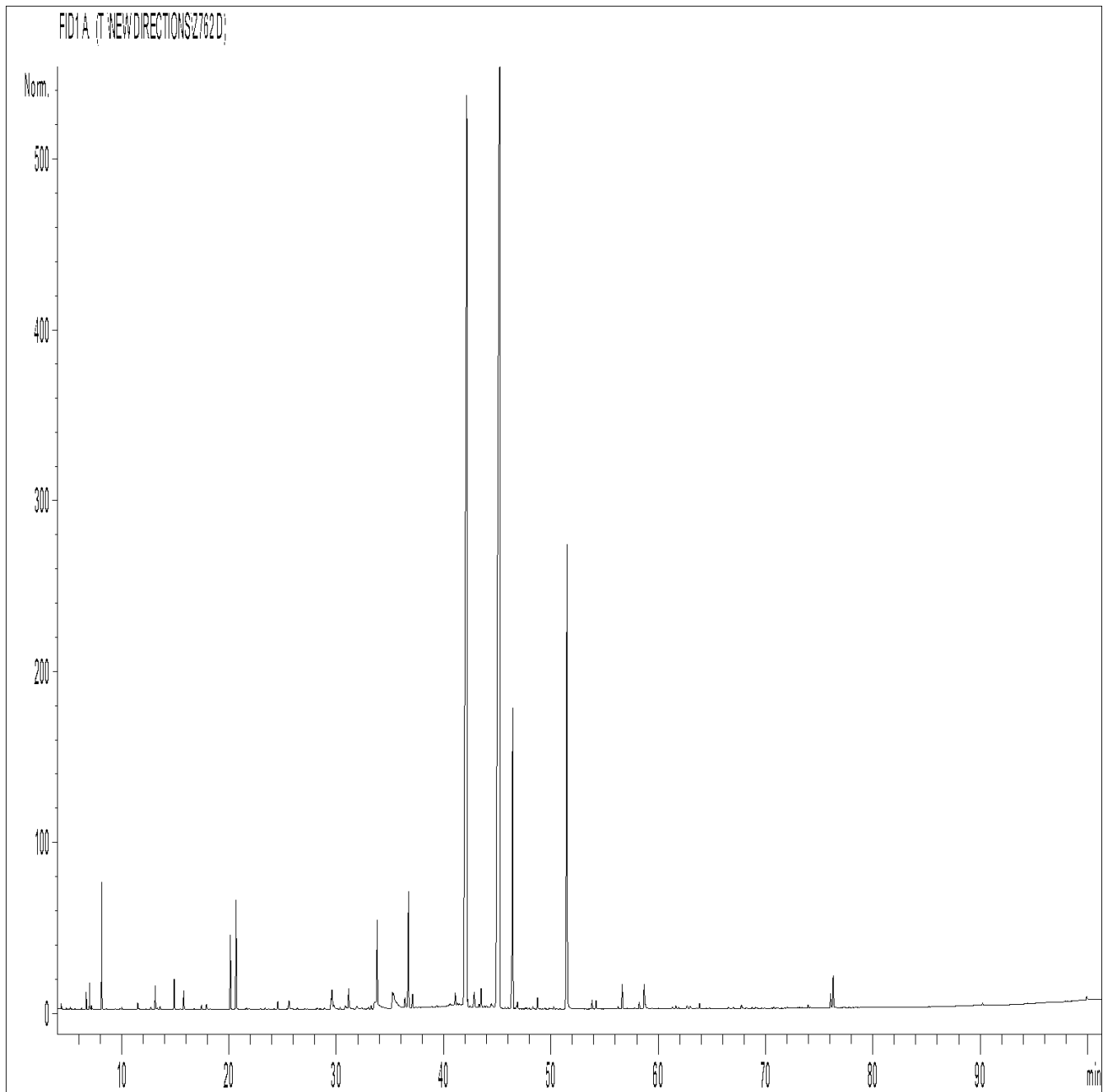


GCMS ANALYSIS

PRODUCT NAME: LEMONGRASS ESSENTIAL OIL - 11080

DATE: October 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: LEMONGRASS ESSENTIAL OIL - 11080

Peak	RT (min)	Compound name	%
1	4.36	ACETONE	0.03
2	5.22	ISOVALERALDEHYDE	0.01
3	6.70	TRICYCLENE	0.12
4	7.00	alpha-PINENE	0.18
5	7.16	alpha-THUYENE	0.03
6	8.13	CAMPHENE	0.99
7	10.03	4-HEPTANONE	0.02
8	11.50	beta-MYRCENE	0.07
9	12.73	1,8-CINEOLE, 2,3-DEHYDRO-	0.03
10	13.14	LIMONENE	0.24
11	13.30	1,8-CINEOLE	0.01
12	13.59	beta-PHELLANDRENE	0.03
13	14.90	cis-beta-OCIMENE	0.31
14	15.79	trans-beta-OCIMENE	0.20
15	17.45	TERPINOLENE	0.05
16	17.91	OCTANAL	0.07
17	20.14	4-NONANONE	0.89
18	20.67	5-HEPTEN-2-ONE, 6-METHYL-	1.32
19	21.64	HEXENYLIC ESTER	0.02
20	22.90	ALLO-OCIMENE	0.01
21	23.36	3-HEXEN-1-OL	0.01
22	24.54	ANISALDEHYDE, TRIMETHYL-	0.10
23	25.59	COMPOUND Mw=152	0.17
24		FURANIC COMPOUND Mw=150	
25	28.23	alpha-CUBEBENE	0.02
26	28.88	LINALOOL trans-OXIDE	0.01
27	29.50	ISOGERANIAL	0.12
28		CYCLOSATIVENE	
29	29.59	CITRONELLAL	0.41
30	29.77	YLANGENE	0.09

Disclaimer & Caution

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GCMS ANALYSIS (cont'd,)

PRODUCT NAME: LEMONGRASS ESSENTIAL OIL - 11080

Peak	RT (min)	Compound name	%
31	30.35	alpha-COPAENE	0.03
32	30.83	DECANAL	0.09
33	31.15	ISONERAL	0.30
34	31.88	COMPOUND Mw=138	0.02
35	31.94	beta-BOURBONENE	0.06
36	32.37	SESQUITERPENE	0.02
37	32.99	4-UNDECANONE	0.03
38	33.24	beta1-CUBEBENE	0.05
39	33.42	EPIPHOTOCITRAL A	0.72
40	33.81	LINALOOL	1.07
41	35.22	EPIPHOTOCITRAL B	1.12
42	35.35	epsilon-CADINENE	0.07
43	36.40	beta-ELEMENE	0.20
44	36.73	beta-CARYOPHYLLENE	1.95
45	37.00	TERPINENE-4-OL	0.04
46	37.11	COMPOUND Mw=166	0.18
47	37.37	6,9-GUAIADIENE	0.02
48	38.89	CADINA-3,5-DIENE	0.02
49	39.36	GERMACRENE A	0.03
50	40.61	ZONARENE	0.04
51	41.10	alpha-HUMULENE	0.23
52	41.30	cis-4,5-MUUROLADIENE	0.03
53	42.17	NERAL	30.51
54	42.24	cis-PIPERITOL	0.09
55	42.45	gamma-MUUROLENE	0.03
56	42.84	alpha-TERPINEOL	0.11
57	42.88	BORNEOL	0.20
58	43.09	SESQUITERPENE	0.02
59	43.32	ACIPHYLLENE	0.05
60	43.50	GERMACRENE D	0.30

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GCMS ANALYSIS (cont'd,)

PRODUCT NAME: LEMONGRASS ESSENTIAL OIL - 11080

Peak	RT (min)	Compound name	%
61	43.81	MUUROLADIENE ISOMER	0.02
62	43.99	CADINENE ISOMER	0.03
63	44.45	PIPERITONE	0.05
64	44.49	alpha-MUUROLENE	0.04
65	45.24	GERANIAL	39.90
66	45.73	trans-PIPERITOL	0.02
67	46.00	trans-ISOPIPERITENOL	0.02
68	46.34	gamma-CADINENE	0.32
69	46.46	GERANYL ACETATE	4.79
70	46.62	E,E-alpha-FARNESENE	0.02
71	46.80	SESQUITERPENE	0.04
72	46.89	CITRONELLOL	0.10
73	47.61	SESQUITERPENE	0.01
74	47.76	CADINA-1,4-DIENE	0.02
75	47.97	gamma-GERANIOL	0.01
76	48.33	alpha-AMORPHENE	0.04
77	48.76	NEROL	0.16
78	49.42	trans-ISOGERANIOL	0.01
79	49.87	CUPARENE	0.01
80	50.03	CALAMENENE	0.01
81	50.27	GERMACRENE B	0.03
82	51.51	GERANIOL	8.48
83	53.85	Epi-CUBEBOL	0.12
84	54.21	GERANYL BUTYRATE	0.11
85	56.26	PHYTYL COMPOUND	0.03
86	56.65	CUBEBOL	0.36
87	58.24	ISOCARYOPHYLLENE EPOXIDE	0.10
88	58.71	CARYOPHYLLENE EPOXIDE	0.41
89	58.78	COMPOUND Mw=152	0.07
90	59.01	SESQUITERPENIC EPOXIDE	0.01

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GCMS ANALYSIS (cont'd,)

PRODUCT NAME: LEMONGRASS ESSENTIAL OIL - 11080

Peak	RT (min)	Compound name	%
91	61.33	ALIPHATIC ALCOHOL	0.03
92	61.66	EPOXY-6,7-HUMULENE	0.05
93	61.91	SESQUITERPENIC EPOXIDE	0.02
94	62.67	Epi-CUBENOL	0.03
95	62.70	CUBENOL	0.05
96	63.01	CAPRYLIC ACID	0.06
97	63.55	SESQUITERPENOL	0.01
98	63.85	ELEMOL	0.08
99	64.77	ALIPHATIC ALCOHOL	0.01
100	66.56	PENTADECANONE, TRIMETHYL-	0.03
101	67.02	SESQUITERPENIC EPOXIDE	0.01
102	67.76	EUGENOL	0.06
103	68.75	SESQUITERPENOL	0.01
104	69.07	alpha-MUUROLOL	0.01
105	69.19	4-VINYL GUAIACOL	0.01
106	70.76	SESQUITERPENOL	0.02
107	71.98	EUGENYL ACETATE	0.01
108	72.05	beta-NOOTKATOL	0.01
109	73.16	CAPRIC ACID	0.02
110	73.40	COMPOUND Mw=168	0.01
111	73.98	NERIC ACID	0.06
112	74.20	TERPENIC ESTER	0.02
113	76.07	GERANIC ACID	0.24
114	76.31	ISOEUGENOL	0.51
115	77.79	SESQUITERPENIC EPOXIDE	0.01
116	89.58	COMPOUND Mw=180	0.01
117	90.23	COMPOUND Mw=286	0.03
		TOTAL	99.96

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