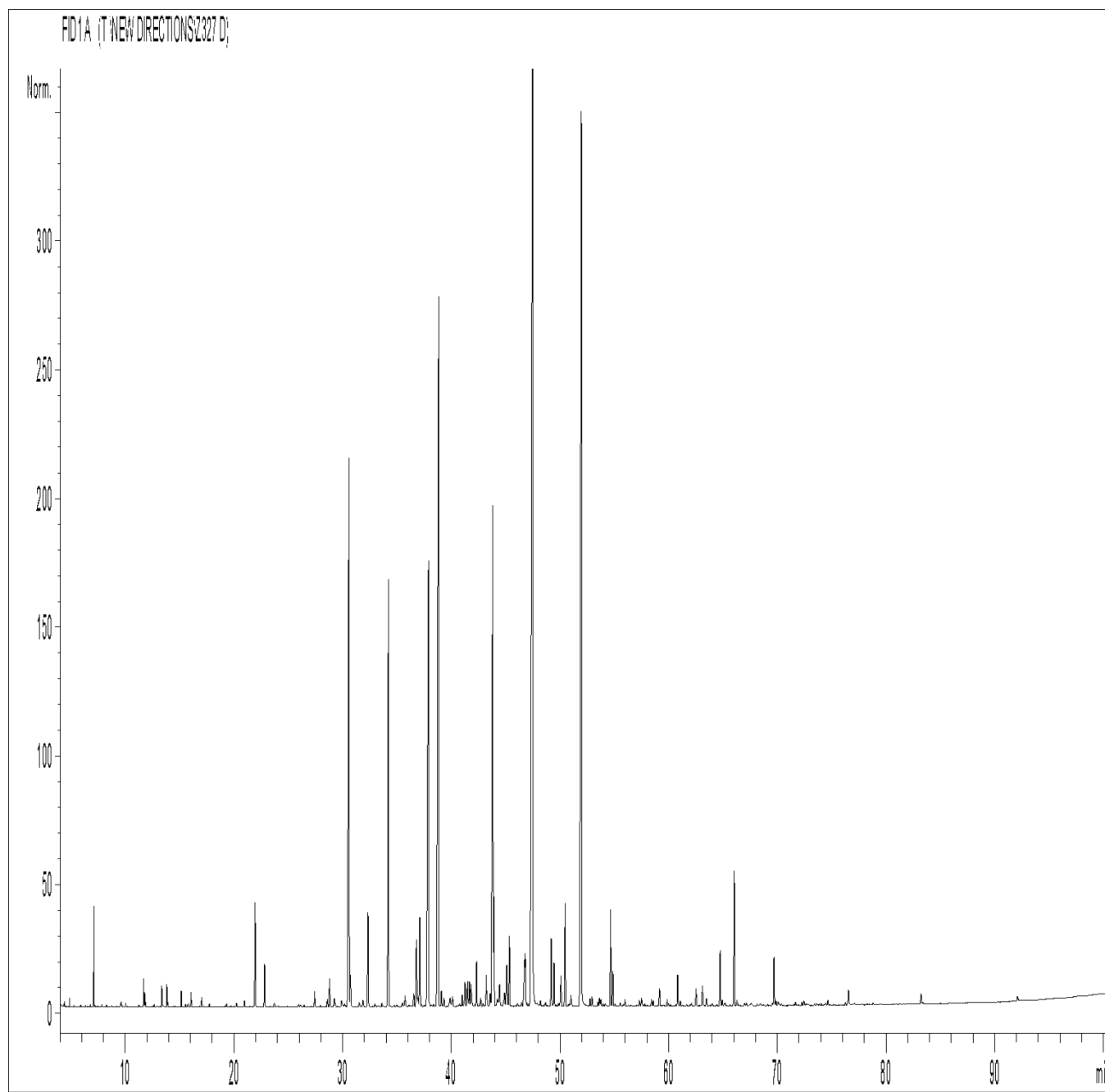


GCMS ANALYSIS

PRODUCT NAME: ROSE GERANIUM ORGANIC ESSENTIAL OIL - 50058

DATE: September 6, 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: ROSE GERANIUM ORGANIC ESSENTIAL OIL - 50058

Peak	RT (min)	Compound name	%
1	4,39	ACETONE	0,02
2	4,87	ETHYLIDENE CYCLOHEXANE	0,03
3	7,11	alpha-PINENE	0,48
4	7,84	5-HEX-3-YN-2-OL, 2,5-DIMETHYL- Mw=124	0,01
5	8,27	CAMPHENE	0,01
6	9,58	beta-PINENE	0,02
7	9,65	DEHYDROXYLINALOOL OXIDE A	0,04
8	10,04	SABINENE	0,02
9	11,27	gamma-PYRONENE	0,02
10	11,71	beta-MYRCENE	0,19
11	11,83	alpha-PHELLANDRENE	0,09
12	12,67	alpha-TERPINENE	0,02
13	12,96	1,8-CINEOLE, 2,3-DEHYDRO-	0,01
14	13,37	LIMONENE	0,16
15	13,83	1,8-CINEOLE	0,11
16	13,84	beta-PHELLANDRENE	0,07
17	13,93	cis-ARBUSCULON	0,03
18	15,16	cis-beta-OCIMENE	0,13
19	15,58	trans-ARBUSCULON	0,02
20	15,79	AROMATIC COMPOUND Mw=122	0,02
21	16,07	trans-beta-OCIMENE	0,12
22	17,04	p-CYMENE	0,09
23	17,75	TERPINOLENE	0,03
24	19,33	ETHANONE CYCLOHEXYL ISOMER	0,03
25	20,23	1-PENTANOL, 3-METHYL-	0,04
26	20,98	5-HEPTEN-2-ONE, 6-METHYL-	0,06
27	21,95	<b>ROSE cis-OXIDE</b>	<b>0,96</b>
28	22,83	<b>ROSE trans-OXIDE</b>	<b>0,40</b>
29	23,73	DIMETHYL CYCLOHEXENE ISOMER	0,05
30	25,97	PHOTOCITRAL ISOMER	0,01

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GCMS ANALYSIS (cont'd.)

PRODUCT NAME: ROSE GERANIUM ORGANIC ESSENTIAL OIL - 50058

Peak	RT (min)	Compound name	%
31	25,98	ETHANONE CYCLOHEXENYL ISOMER	0,01
32	26,13	cis-p-MENTHANE-8-OL	0,01
33	26,14	PERILLENE	0,02
34	26,46	trans-p-MENTHANE-8-OL	0,02
35	27,43	LINALOOL cis-OXIDE	0,15
36	27,98	1-OCTEN-3-OL	0,02
37	28,61	alpha-CUBEBENE	0,08
38	28,81	<b>MENTHONE</b>	<b>0,29</b>
39	29,24	LINALOOL trans-OXIDE	0,09
40	29,32	NERYL OXIDE	0,04
41	29,90	CITRONELLAL	0,06
42	29,94	ISOGERANIAL	0,03
43	30,00	SESQUITERPENE	0,03
44	30,20	YLANGENE	0,03
45	30,60	<b>ISOMENTHONE</b>	<b>7,43</b>
46	30,73	alpha-COPAENE	0,36
47	31,53	ISONERAL	0,05
48	31,88	alpha-BOURBONENE	0,09
49	32,34	beta-BOURBONENE	1,07
50	32,43	SESQUITERPENE	0,01
51	32,98	alpha-GURJUNENE	0,04
52	33,24	COMPOUND Mw=152	0,01
53	33,62	beta1-CUBEBENE	0,04
54	33,76	ALIPHATIC ALCOHOL	0,01
55	34,22	<b>LINALOOL</b>	<b>4,49</b>
56	34,78	1-OCTANOL	0,01
57	34,98	NEOISOPULEGOL	0,02
58	35,51	ISOPULEGOL	0,06
59	35,75	epsilon-CADINENE	0,14
60	36,56	alpha-trans-BERGAMOTENE	0,16

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GCMS ANALYSIS (cont'd.)

PRODUCT NAME: ROSE GERANIUM ORGANIC ESSENTIAL OIL - 50058

Peak	RT (min)	Compound name	%
61	36,80	alpha-GUAIENE	0,85
62	36,94	beta-CUBEBENE	0,09
63	37,12	beta-CARYOPHYLLENE	1,09
64	37,28	KETONIC COMPOUND	0,02
65	37,48	TERPINENE-4-OL	0,02
66	37,89	<b>6,9-GUAIADIENE</b>	<b>7,04</b>
67	37,99	SESQUITERPENE	0,02
68	38,17	HOTRIENOL	0,02
69	38,20	SESQUITERPENE	0,01
70	38,35	SESQUITERPENE	0,03
71	38,83	<b>CITRONELLYL FORMIATE</b>	<b>11,45</b>
72	39,09	NEOISOMENTHOL	0,17
73	39,32	CADINA-3,5-DIENE	0,11
74	39,88	GERMACRENE A	0,16
75	40,04	KETONIC COMPOUND	0,02
76	40,11	ALLO-AROMADENDRENE	0,13
77	40,66	5-HEPTEN-1-OL, 2,6-DIMETHYL-	0,02
78	40,76	MYRTENIC ESTER	0,03
79	40,99	ZONARENE	0,13
80	41,19	SESQUITERPENE	0,05
81	41,25	CITRONELLYL ACETATE	0,25
82	41,48	alpha-HUMULENE	0,30
83	41,65	NERYL FORMIATE	0,28
84	41,81	SESQUITERPENE	0,30
85	41,89	SESQUITERPENE	0,04
86	42,12	SESQUITERPENE	0,01
87	42,17	ALIPHATIC ESTER	0,02
88	42,32	NERAL	0,48
89	42,59	ALIPHATIC ESTER	0,02
90	42,69	gamma-MUUROLENE	0,10

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GCMS ANALYSIS (cont'd,)

PRODUCT NAME: ROSE GERANIUM ORGANIC ESSENTIAL OIL - 50058

Peak	RT (min)	Compound name	%
91	42,93	CALARENE	0,04
92	43,21	<b>alpha-TERPINEOL</b>	<b>0,33</b>
93	43,27	CALAMENENE ISOMER	0,08
94	43,58	MYRTANYL ESTER	0,14
95	43,81	<b>GERANYL FORMIATE</b>	<b>6,54</b>
96	43,91	GERMACRENE D	1,16
97	44,09	SESQUITERPENE	0,02
98	44,21	alpha-BULNESENE	0,08
99	44,25	SESQUITERPENE	0,04
100	44,43	beta-SELINENE	0,33
101	44,57	PIPERITONE	0,02
102	44,84	alpha-SELINENE	0,07
103	44,89	alpha-MUUROLENE	0,16
104	45,10	CITRONELLYL PROPIONATE	0,53
105	45,16	BICYCLOGERMACRENE	0,06
106	45,34	GERANIAL	0,74
107	45,93	SESQUITERPENE	0,02
108	46,09	cis-MYRTANYL ACETATE	0,05
109	46,46	E,E-alpha-FARNESENE	0,05
110	46,67	gamma-CADINENE	0,13
111	46,73	delta-CADINENE	0,50
112	46,80	GERANYL ACETATE	0,57
113	46,96	SESQUITERPENE	0,04
114	47,10	SESQUITERPENE Mw=202	0,03
115	47,49	<b>CITRONELLOL</b>	<b>22,29</b>
116	47,89	SESQUITERPENE	0,05
117	47,95	SESQUITERPENE	0,02
118	48,14	MENTHADIENOL ISOMER	0,02
119	48,20	CADINA-1,4-DIENE	0,07
120	48,42	gamma-GERANIOL	0,01

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GCMS ANALYSIS (cont'd.)

PRODUCT NAME: ROSE GERANIUM ORGANIC ESSENTIAL OIL - 50058

Peak	RT (min)	Compound name	%
121	48,60	MYRTENOL	0,02
122	48,68	NERYL PROPIONATE	0,05
123	48,79	alpha-AMORPHENE	0,01
124	49,19	NEROL	0,71
125	49,46	CITRONELLYL BUTYRATE	0,45
126	49,65	cis-ISOGERANIOL	0,01
127	49,85	TERPENIC ESTER	0,03
128	49,97	CITRONELIC ESTER	0,04
129	50,08	NERYL BUTYRATE	0,34
130	50,47	GERANYL PROPIONATE	1,07
131	50,78	GERMACRENE B	0,02
132	50,90	CITRONELIC ESTER	0,03
133	51,01	CALAMENENE	0,14
134	51,96	<b>GERANIOL</b>	<b>13,30</b>
135	52,76	GERANYL ISOBUTYRATE	0,08
136	52,94	trans-MYRTANOL	0,12
137	53,49	ALIPHATIC ALCOHOL	0,04
138	53,63	2-PHENYLETHYL ISOBUTYRATE	0,10
139	53,75	2-PHENYLETHYL BUTYRATE	0,07
140	53,98	KETONIC COMPOUND	0,04
141	54,66	<b>GERANYL BUTYRATE</b>	<b>1,02</b>
142	54,87	NERYL METHYLBUTYRATE	0,38
143	55,04	AROMATIC COMPOUND	0,03
144	55,53	alpha-CALACORENE	0,05
145	55,83	SESQUITERPENIC EPOXIDE	0,02
146	55,98	GERANYL METHYLBUTYRATE	0,08
147	56,29	CITRONELIC ESTER	0,01
148	56,48	SESQUITERPENIC EPOXIDE	0,01
149	56,57	CALACORENE ISOMER	0,01
150	57,07	CUBEBOL	0,02

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GCMS ANALYSIS (cont'd.)

PRODUCT NAME: ROSE GERANIUM ORGANIC ESSENTIAL OIL - 50058

Peak	RT (min)	Compound name	%
151	57,31	BISNORSESEQUITERPENE-1,4,5-ESQUEL-7-EN-9-ONE	0,07
152	57,50	CITRONELIC ESTER	0,09
153	57,57	AROMATIC COMPOUND Mw=209	0,02
154	57,80	beta-CALACORENE	0,04
155	58,07	ALIPHATIC ESTER	0,02
156	58,42	FUROPALARGONE ISOMER	0,07
157	58,57	PHENYLETHYLIC ESTER	0,07
158	59,16	CARYOPHYLLENE EPOXIDE	0,22
159	59,45	ALIPHATIC ALCOHOL	0,01
160	59,53	PHENYLETHYLIC ESTER	0,01
161	59,86	GERANIC ESTER	0,07
162	60,01	CITRONELLYL ISOVALERATE	0,03
163	60,65	KETONIC COMPOUND	0,02
164	60,83	CITRONELLYL TIGLATE	0,35
165	61,07	NERYL TIGLATE	0,06
166	61,98	LEDOL	0,02
167	62,11	EPOXY-6,7-HUMULENE	0,04
168	62,51	GERANYL ISOVALERATE	0,19
169	62,80	JUNEOL	0,01
170	63,11	Epi-CUBENOL	0,28
171	63,48	CUBENOL	0,11
172	63,99	GUAJOL	0,04
173	64,44	TERPENIC ESTER	0,02
174	64,73	FUROPALARGONE	0,63
175	64,93	GERANYL CAPROATE	0,08
176	65,10	CITRONELIC ESTER	0,03
177	65,20	PHENYLETHYLIC ESTER	0,04
178	65,34	COMPOUND Mw=232	0,01
179	65,62	ALIPHATIC ALCOHOL	0,02
180	66,03	<b>GERANYL TIGLATE</b>	<b>1,49</b>

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GCMS ANALYSIS (cont'd.)

PRODUCT NAME: ROSE GERANIUM ORGANIC ESSENTIAL OIL - 50058

Peak	RT (min)	Compound name	%
181	66,28	GERANIC ESTER	0,09
182	66,44	cis-3-HEXENYL BENZOATE	0,02
183	66,99	SESQUITERPENOL	0,05
184	67,16	ALIPHATIC ESTER	0,04
185	67,47	SESQUITERPENOL	0,03
186	67,59	CITRONELIC ESTER	0,03
187	68,12	SESQUITERPENIC EPOXIDE	0,02
188	68,41	ALIPHATIC ESTER	0,02
189	68,45	SESQUITERPENIC EPOXIDE	0,02
190	68,74	T-CADINOL	0,02
191	69,53	alpha-MUUROLOL	0,03
192	69,69	<b>2-PHENYLETHYL TIGLATE</b>	<b>0,55</b>
193	69,86	TERPENIC ESTER	0,06
194	70,06	delta-CADINOL	0,06
195	71,53	AROMATIC COMPOUND	0,02
196	71,67	alpha-CADINOL	0,05
197	72,27	TERPENIC ESTER	0,04
198	72,44	EUDESMA-7(11)-EN-4-OL	0,06
199	72,64	CITRONELIC ACID	0,03
200	72,80	SESQUITERPENONE	0,01
201	74,65	TERPENIC ESTER	0,07
202	74,83	NERIC ACID	0,01
203	76,26	SESQUITERPENIC EPOXIDE	0,04
204	76,46	KETONIC COMPOUND	0,01
205	76,54	GERANIC ACID	0,20
206	76,96	SESQUITERPENIC EPOXIDE	0,01
207	77,09	MANOYL OXIDE	0,03
208	78,27	SESQUITERPENIC EPOXIDE	0,02
209	79,57	GUAIAZULEN	0,01
210	83,22	LAURIC ACID	0,14
		<b>TOTAL</b>	<b>99,86</b>

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