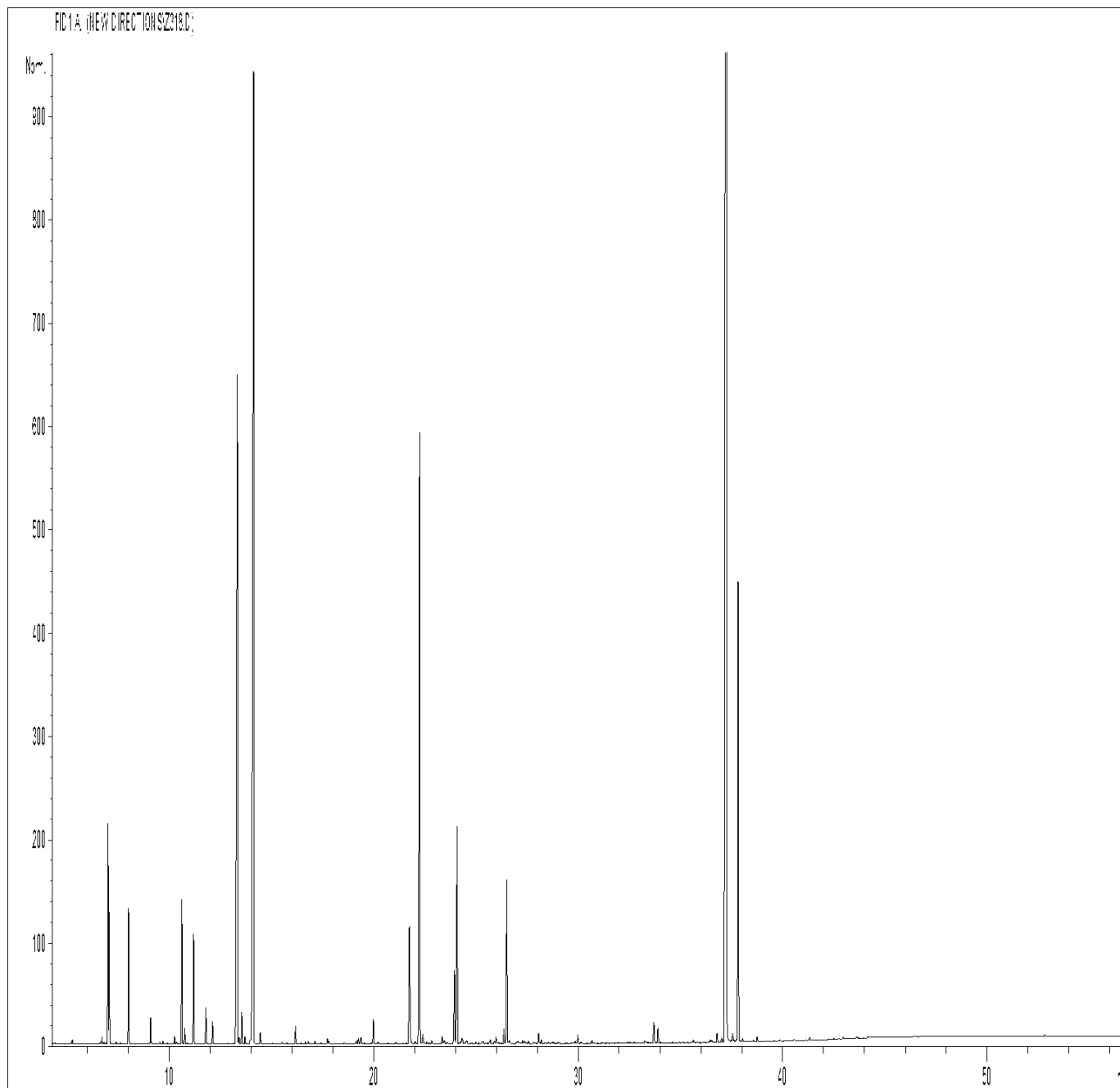


GCMS ANALYSIS

PRODUCT NAME: THYME WHTIE ESSENTIAL OIL - 11146

DATE: September 13, 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: THYME WHITIE ESSENTIAL OIL - 11146

Peak	RT (min)	Compound name	%
1	4,38	ACETONE	0,01
2	5,22	2-METHYLBUTANAL	0,01
3	5,26	ISOVALERALDEHYDE	0,02
4	6,64	METHYL 2-METHYLBUTYRATE	0,01
5	6,71	TRICYCLENE	0,04
6	6,82	METHYL CYCLOHEXANE ISOMER	0,01
7	6,90	METHYL ISOVALERATE	0,01
8	7,00	<b>alpha-PINENE</b>	<b>1,53</b>
9	7,07	<b>alpha-THUYENE</b>	<b>0,83</b>
10	7,41	MENTHANE ISOMER	0,01
11	7,61	CAMPHENE	0,01
12	8,02	beta-PINENE	0,99
13	9,09	SABINENE	0,20
14	9,54	PINADIENE	0,01
15	9,69	THUYADIENE	0,02
16	9,90	MENTHENE ISOMER	0,01
17	10,26	delta3-CARENE	0,06
18	10,36	3-HEPTANONE	0,01
19	10,62	<b>beta-MYRCENE</b>	<b>1,13</b>
20	10,75	alpha-PHELLANDRENE	0,12
21	10,87	psi-LIMONENE	0,01
22	11,19	<b>alpha-TERPINENE</b>	<b>0,89</b>
23	11,79	LIMONENE	0,29
24	12,11	1,8-CINEOLE	0,07
25	12,20	beta-PHELLANDRENE	0,14
26	12,84	Cis-beta-OCIMENE	0,01
27	13,33	<b>gamma-TERPINENE</b>	<b>8,60</b>
28	13,41	Trans-beta-OCIMENE	0,06
29	13,55	3-OCTANONE	0,26
30	13,70	4-PENTEN-1-OL, PROPANOATE	0,06

**Disclaimer & Caution**

Please refer to all relevant technical information specific to the product, prior to use. The information contained in this document is obtained from current and reliable sources. New Directions Aromatics Inc. provides the information contained herein, but makes no representation as to its comprehensiveness or accuracy. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose. The user of the product is solely responsible for compliance with all laws and regulations applying to the use of the products, including intellectual property rights of third parties. As the ordinary or otherwise use(s) of this product is outside the control of New Directions Aromatics Inc., no representation or warranty, expressed or implied, is made as to the effect(s) of such use(s), (including damage or injury), or the results obtained. The liability of New Directions Aromatics Inc. is limited to the value of the goods and does not include any consequential loss. New Directions Aromatics Inc. shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon. New Directions Aromatics Inc. shall not be responsible for any damages resulting from use of or reliance upon this information. In the event of any dispute, the Customer hereby agrees that Jurisdiction is limited to the province of Ontario.

GCMS ANALYSIS (cont'd.)

PRODUCT NAME: THYME WHITIE ESSENTIAL OIL - 11146

Peak	RT (min)	Compound name	%
31	13,98	m-CYMENE	0,05
32	14,12	<b>p-CYMENE</b>	<b>13,37</b>
33	14,45	TERPINOLENE	0,09
34	15,51	ALIPHATIC ESTER	0,01
35	15,75	PINOL	0,01
36	16,18	4-PENTENYL BUTYRATE	0,14
37	16,66	PRENYL, 3-METHYLBUTYRATE-	0,02
38	16,80	2-NONANONE	0,02
39	17,12	ISOPRENYL ISOVALERATE	0,02
40	17,41	3-HEXEN-1-OL	0,01
41	17,73	3-OCTANOL	0,04
42	17,80	ALIPHATIC ESTER	0,02
43	18,56	HEXENYLIC ESTER	0,02
44	19,15	ALIPHATIC ESTER	0,03
45	19,25	1-OCTEN-3-OL	0,05
46	19,30	alpha,p-DIMETHYLSTYRENE	0,05
47	19,38	LINALOOL Cis-OXIDE	0,03
48	19,55	HEXENYLIC ESTER	0,01
49	19,98	<b>Trans-THUYANOL</b>	<b>0,21</b>
50	20,20	LINALOOL trans-OXIDE	0,02
51	21,08	alpha-COPAENE	0,02
52	21,74	CAMPHOR	1,53
53	21,80	beta-BOURBONENE	0,01
54	22,02	ALIPHATIC ESTER	0,03
55	22,24	<b>LINALOOL</b>	<b>6,30</b>
56	22,40	Cis-THUYANOL	0,09
57	22,59	LINALYL ACETATE	0,01
58	22,83	Trans-p-MENTH-2-EN-1-OL	0,03
59	23,33	BORNYL FORMIATE	0,07
60	23,45	BORNYL ACETATE	0,05

**Disclaimer & Caution**

Please refer to all relevant technical information specific to the product, prior to use. The information contained in this document is obtained from current and reliable sources. New Directions Aromatics Inc. provides the information contained herein, but makes no representation as to its comprehensiveness or accuracy. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose. The user of the product is solely responsible for compliance with all laws and regulations applying to the use of the products, including intellectual property rights of third parties. As the ordinary or otherwise use(s) of this product is outside the control of New Directions Aromatics Inc., no representation or warranty, expressed or implied, is made as to the effect(s) of such use(s), (including damage or injury), or the results obtained. The liability of New Directions Aromatics Inc. is limited to the value of the goods and does not include any consequential loss. New Directions Aromatics Inc. shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon. New Directions Aromatics Inc. shall not be responsible for any damages resulting from use of or reliance upon this information. In the event of any dispute, the Customer hereby agrees that Jurisdiction is limited to the province of Ontario.

GCMS ANALYSIS (cont'd.)

PRODUCT NAME: THYME WHITIE ESSENTIAL OIL - 11146

Peak	RT (min)	Compound name	%
61	23,58	alpha-trans-BERGAMOTENE	0,02
62	23,94	<b>TERPINENE-4-OL</b>	<b>0,76</b>
63	24,00	<b>METHYL CARVACROL ETHER</b>	<b>0,47</b>
64	24,07	<b>beta-CARYOPHYLLENE</b>	<b>1,70</b>
65	24,31	Cis-DIHYDROCARVONE	0,06
66	24,33	AROMADENDRENE	0,02
67	24,54	Cis-p-MENTH-2-EN-1-OL	0,02
68	24,79	Trans-DIHYDROCARVONE	0,01
69	24,99	ALIPHATIC ESTER	0,01
70	25,35	ALLO-AROMADENDRENE	0,03
71	25,46	MENTHADIENOL ISOMER	0,01
72	25,55	SESQUITERPENE	0,01
73	25,70	LAVANDULOL	0,05
74	25,89	Trans-VERBENOL	0,02
75	25,97	alpha-HUMULENE	0,06
76	26,09	NERAL	0,01
77	26,37	gamma-MUUROLENE + alpha-TERPINEOL	0,14
78	26,50	BORNEOL	1,50
79	26,63	LEDENE	0,04
80	27,05	VERBENONE	0,04
81	27,28	CARVENONE	0,03
82	27,38	alpha-MUUROLENE	0,03
83	27,57	CARVONE	0,03
84	27,81	Trans-ISOPIPERITENOL	0,02
85	28,06	delta-CADINENE	0,10
86	28,20	gamma-CADINENE	0,04
87	28,99	NEROL	0,02
88	29,69	trans-CARVEOL	0,01
89	29,85	GERANIOL	0,02
90	29,98	p-CYMENE-8-OL	0,08

**Disclaimer & Caution**

Please refer to all relevant technical information specific to the product, prior to use. The information contained in this document is obtained from current and reliable sources. New Directions Aromatics Inc. provides the information contained herein, but makes no representation as to its comprehensiveness or accuracy. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose. The user of the product is solely responsible for compliance with all laws and regulations applying to the use of the products, including intellectual property rights of third parties. As the ordinary or otherwise use(s) of this product is outside the control of New Directions Aromatics Inc., no representation or warranty, expressed or implied, is made as to the effect(s) of such use(s), (including damage or injury), or the results obtained. The liability of New Directions Aromatics Inc. is limited to the value of the goods and does not include any consequential loss. New Directions Aromatics Inc. shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon. New Directions Aromatics Inc. shall not be responsible for any damages resulting from use of or reliance upon this information. In the event of any dispute, the Customer hereby agrees that Jurisdiction is limited to the province of Ontario.

GCMS ANALYSIS (cont'd.)

PRODUCT NAME: THYME WHITIE ESSENTIAL OIL - 11146

Peak	RT (min)	Compound name	%
91	30,68	MYRCENOL	0,03
92	31,14	GERANYL BUTYRATE	0,01
93	31,44	NERYL METHYLBUTYRATE	0,01
94	33,26	ALLYL PHENOL ISOMER	0,02
95	33,70	CARYOPHYLLENE OXIDE	0,22
96	33,90	AROMATIC COMPOUND	0,14
97	35,62	CUMINOL	0,03
98	36,46	SPATHULENOL	0,03
99	36,53	AROMATIC COMPOUND	0,02
100	36,79	ISOTHYMOL	0,08
101	37,02	EUGENOL	0,04
102	37,23	<b>THYMOL</b>	<b>51,71</b>
103	37,55	ISOCARVACROL	0,08
104	37,81	<b>CARVACROL</b>	<b>4,31</b>
105	38,04	PHENOLIC COMPOUND	0,03
106	38,55	alpha-CADINOL	0,01
107	38,75	PHENOLIC COMPOUND	0,05
108	40,55	SESQUITERPENIC EPOXIDE	0,02
109	41,31	SESQUITERPENIC EPOXIDE	0,03
		<b>TOTAL</b>	<b>100,00</b>

**Disclaimer & Caution**

Please refer to all relevant technical information specific to the product, prior to use. The information contained in this document is obtained from current and reliable sources. New Directions Aromatics Inc. provides the information contained herein, but makes no representation as to its comprehensiveness or accuracy. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose. The user of the product is solely responsible for compliance with all laws and regulations applying to the use of the products, including intellectual property rights of third parties. As the ordinary or otherwise use(s) of this product is outside the control of New Directions Aromatics Inc., no representation or warranty, expressed or implied, is made as to the effect(s) of such use(s), (including damage or injury), or the results obtained. The liability of New Directions Aromatics Inc. is limited to the value of the goods and does not include any consequential loss. New Directions Aromatics Inc. shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon. New Directions Aromatics Inc. shall not be responsible for any damages resulting from use of or reliance upon this information. In the event of any dispute, the Customer hereby agrees that Jurisdiction is limited to the province of Ontario.