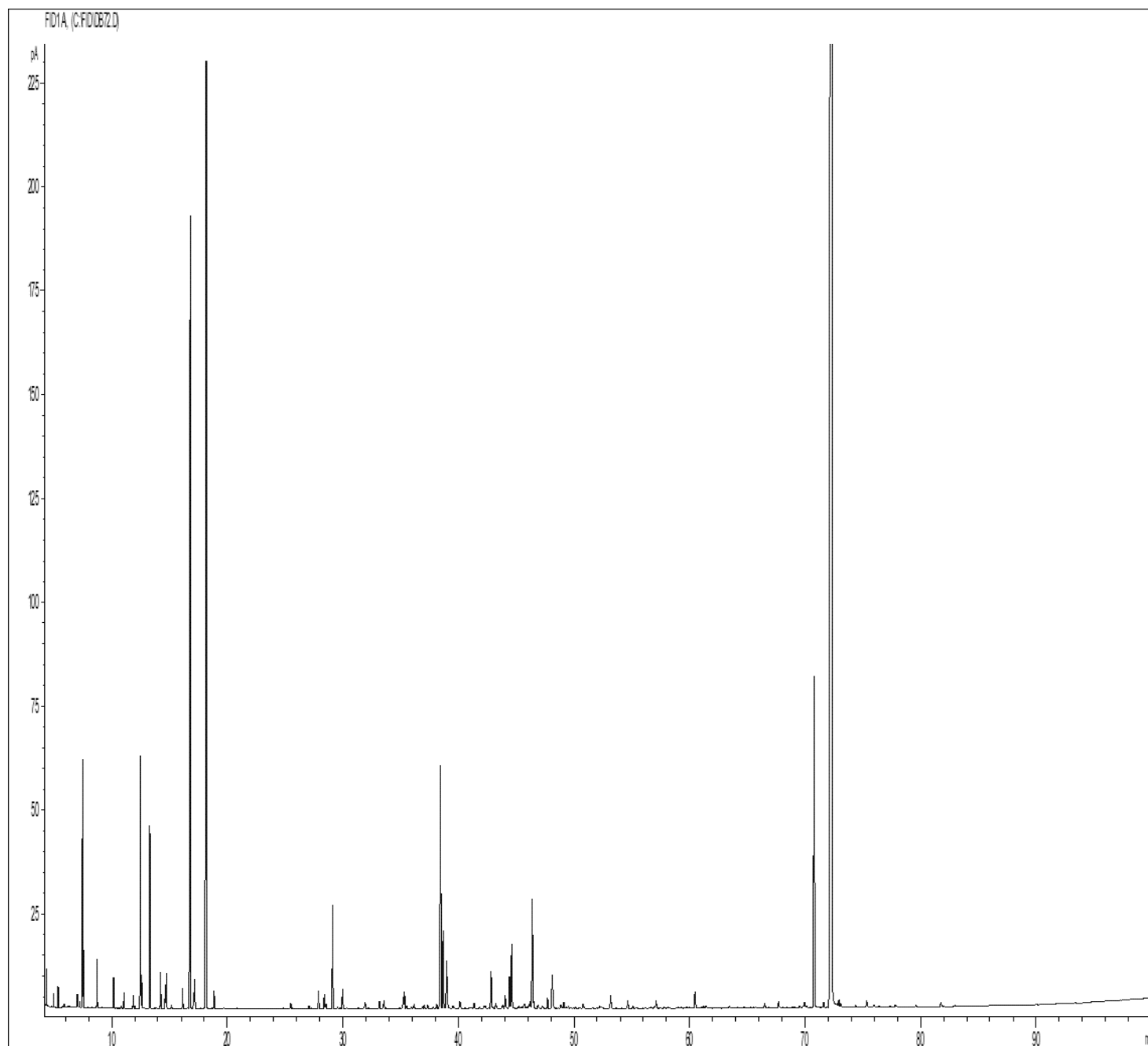


GCMS ANALYSIS

PRODUCT NAME: ORIGANUM ORGANIC ESSENTIAL OIL - 50039

DATE: November 06, 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: ORIGANUM ORGANIC ESSENTIAL OIL - 50039

Peak	RT (min)	Compound name	%
1	4,36	ACETONE	0,10
2	4,98	ETHYL ACETATE	0,04
3	5,32	BUTANAL, 2-METHYL-	0,05
4	5,37	ISOVALERALDEHYDE	0,06
5	5,89	FURAN, 2-ETHYL-	0,01
6	7,02	METHYL 2-METHYLBUTYRATE	0,05
7	7,08	TRICYCLENE	0,01
8	7,24	METHYL ISOVALERATE	0,02
9	7,43	alpha-PINENE	0,64
10	7,51	alpha-THUYENE	0,90
11	8,72	CAMPHENE	0,21
12	10,16	beta-PINENE	0,14
13	10,82	PINADIENE	0,01
14	11,05	THUYA-2,4-DIENE	0,08
15	11,85	delta3-CARENE	0,07
16	12,47	beta-MYRCENE	1,28
17	12,59	alpha-PHELLANDRENE	0,16
18	13,29	alpha-TERPINENE	0,96
19	14,22	LIMONENE	0,20
20	14,62	1,8-CINEOLE	0,07
21	14,71	beta-PHELLANDRENE	0,20
22	15,19	2-HEXENAL	0,02
23	16,14	cis-beta-OCIMENE	0,12
24	16,80	gamma-TERPINENE	5,32
25	17,08	trans-beta-OCIMENE	0,09
26	17,17	3-OCTANONE	0,17
27	18,19	p-CYMENE	6,44
28	18,87	TERPINOLENE	0,11
29	25,49	3-OCTANOL	0,04
30	27,08	COMPOUND Mw=152	0,02

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: ORIGANUM ORGANIC ESSENTIAL OIL - 50039

Peak	RT (min)	Compound name	%
31	27,91	COMPOUND Mw=152	0,13
32	28,41	alpha-p-DIMETHYLSTYRENE	0,11
33	28,56	MENTHATRIENIC COMPOUND	0,04
34	29,13	1-OCTEN-3-OL	0,68
35	29,56	alpha-CUBEBENE	0,01
36	29,99	trans-THUYANOL	0,14
37	31,36	YLANGENE	0,01
38	31,88	DIHYDROEDULAN ISOMER	0,01
39	31,93	alpha-COPAENE	0,05
40	33,18	COMPOUND Mw=152	0,06
41	33,53	CAMPHOLENIC ALCOHOL	0,01
42	33,57	beta-BOURBONENE	0,06
43	35,23	cis-THUYANOL	0,08
44	35,34	LINALOOL	0,11
45	35,53	1-NONEN-3-OL	0,02
46	35,94	LINALYL ACETATE	0,02
47	36,18	trans-p-MENTH-2-EN-1-OL	0,04
48	36,88	BORNYL FORMATE	0,01
49	37,04	epsilon-CADINENE	0,03
50	37,36	BORNYL ACETATE	0,03
51	37,84	alpha-trans-BERGAMOTENE	0,02
52	38,13	beta-CUBEBENE	0,04
53	38,47	beta-CARYOPHYLENE	1,94
54	38,69	METHYL CARVACROL ETHER	0,56
55	38,98	TERPINENE-4-OL	0,43
56	39,00	cis-DIHYDROCARVONE	0,03
57	39,57	AROMADENDRENE	0,02
58	40,14	TERPENIC ESTER	0,05
59	40,18	trans-DIHYDROCARVONE	0,02
60	41,38	ALLO-AROMADENDRENE	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: ORIGANUM ORGANIC ESSENTIAL OIL - 50039

Peak	RT (min)	Compound name	%
61	41,84	trans-PINOCARVEOL	0,02
62	42,24	FURANIC COMPOUND	0,02
63	42,34	ZONARENE	0,02
64	42,83	alpha-HUMULENE	0,30
65	42,97	cis-4,5-MUUROLADIENE	0,01
66	43,25	CARVOTANACETONE	0,04
67	43,85	LAVANDULAL	0,03
68	44,05	gamma-MUUROLENE	0,10
69	44,43	alpha-TERPINEOL	0,24
70	44,63	BORNEOL	0,48
71	45,23	SESQUITERPENE	0,01
72	45,46	SESQUITERPENE	0,01
73	45,69	PELLANDRAL	0,02
74	45,72	PIPERITONE	0,03
75	46,15	CARVONE	0,02
76	46,20	alpha-MUUROLENE	0,05
77	46,40	beta-BISABOLENE	0,86
78	46,52	COMPOUND Mw=152	0,04
79	46,90	trans-PIPERITOL	0,03
80	47,27	trans-ISOPIPERITENOL	0,02
81	47,72	E,E-alpha-FARNESENE	0,08
82	48,13	delta-CADINENE	0,27
83	48,18	gamma-CADINENE	0,09
84	48,87	beta-SESQUIPELLANDRENE	0,03
85	48,98	CUMINAL	0,01
86	49,14	trans-alpha-BISABOLENE	0,05
87	49,32	CADINA-1,4-DIENE	0,01
88	49,53	MYRTENOL	0,02
89	50,12	alpha-AMORPHENE	0,02
90	50,52	PIPERITONE, 2-HYDROXY-	0,02

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: ORIGANUM ORGANIC ESSENTIAL OIL - 50039

Peak	RT (min)	Compound name	%
91	50,80	trans-SABINOL	0,03
92	52,27	cis-CALAMENENE	0,02
93	52,40	trans-CALAMENENE	0,02
94	53,20	p-CYMENE-8-OL	0,11
95	54,67	CARVACRYL ACETATE	0,06
96	55,11	MYRCENOL	0,02
97	57,11	PHENOLIC COMPOUND Mw=164	0,07
98	58,15	ALIPHATIC ALCOHOL	0,01
99	59,04	ALIPHATIC ALCOHOL	0,01
100	59,78	PIPERITENONE OXIDE	0,02
101	59,99	ISOCARYOPHYLLENE EPOXIDE	0,01
102	60,49	CARYOPHYLLENE EPOXIDE	0,14
103	61,07	SESQUITERPENIC EPOXIDE	0,01
104	61,22	SESQUITERPENIC EPOXIDE	0,02
105	61,43	KETONIC COMPOUND	0,03
106	63,46	EPOXY-6,7-HUMULENE	0,02
107	66,53	CUMINOL	0,04
108	67,73	SPATHULENOL	0,05
109	69,55	EUGENOL	0,02
110	69,96	ISOTHYMOL	0,05
111	70,11	T-CADINOL	0,02
112	70,79	THYMOL	2,55
113	71,62	ISOCARVACROL	0,05
114	72,29	CARVACROL	70,99
115	72,78	SESQUITERPENOL	0,02
116	72,94	PHENOLIC COMPOUND Mw=150	0,05
117	73,09	beta-EUDESOL	0,03
118	74,39	PHENOLIC COMPOUND Mw=150	0,01
119	75,34	PHENOLIC COMPOUND Mw=150	0,06
120	75,98	PHENOLIC COMPOUND Mw=150	0,02
121	77,79	SESQUITERPENIC EPOXIDE	0,02
122	79,61	SESQUITERPENIC EPOXIDE	0,01
123	81,76	PHENOLIC COMPOUND Mw=148	0,04
		TOTAL	99,96

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.