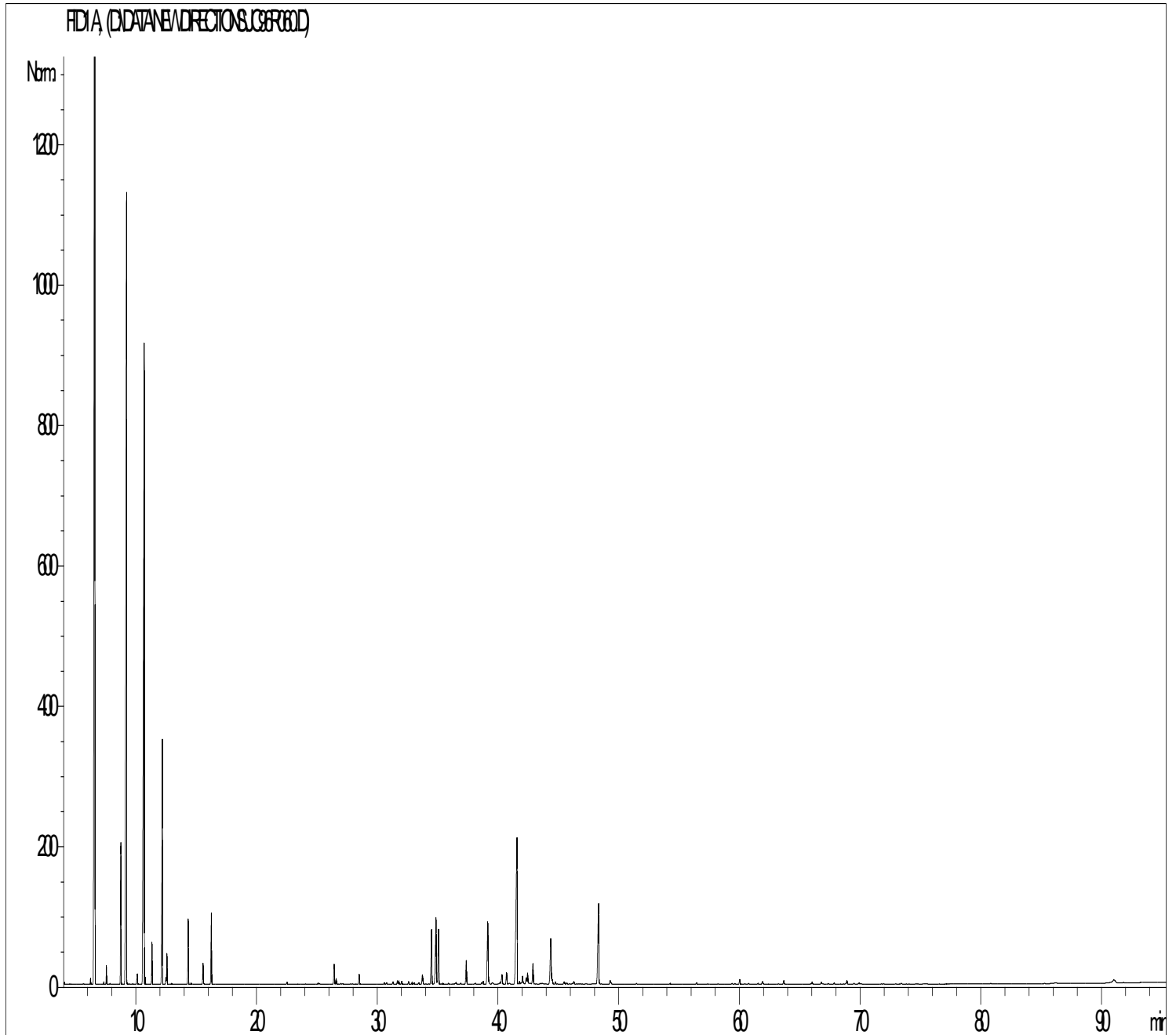




GCMS ANALYSIS

PRODUCT NAME: JUNIPER BERRY (SLOVENIA) ESSENTIAL OIL - 11273

DATE: May 25, 2018



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: JUNIPER BERRY (SLOVENIA) ESSENTIAL OIL - 11273

Peak	RT (min)	Compound name	%
1	4,0	ACETONE	0,02
2	6,2	TRICYCLENE	0,07
3	6,5	alpha-PINENE	33,25
4	6,6	alpha-THUYENE	0,90
5	7,3	alpha-FENCHENE	0,03
6	7,5	CAMPHENE	0,21
7	7,8	HEXANAL	0,01
8	8,7	beta-PINENE	2,06
9	9,2	SABINENE	18,22
10	9,3	PINADIENE	0,02
11	9,4	THUYADIENE	0,01
12	9,7	ALIPHATIC METHYL ALCOHOL	0,01
13	10,1	delta3-CARENE	0,20
14	10,7	beta-MYRCENE	16,13
15	10,8	alpha-PHELLANDRENE	0,06
16	11,3	alpha-TERPINENE	0,57
17	12,2	LIMONENE	4,49
18	12,4	1,8-CINEOLE	0,10
19	12,5	beta-PHELLANDRENE	0,44
20	12,9	2-HEXENAL	0,02
21	13,7	Cis-beta-OCIMENE	0,01
22	14,3	gamma-TERPINENE	1,07
23	14,5	Trans-beta-OCIMENE	0,02
24	15,5	p-CYMENE	0,36
25	16,2	TERPINOLENE	1,25
26	22,5	GALBANOLENE	0,04
27	23,4	ALIPHATIC ESTER	0,01
28	24,0	PERILLENE	0,01
29	25,0	alpha,p-DIMETHYLSTYRENE	0,03
30	25,2	MENTHATRIENE ISOMER	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: JUNIPER BERRY (SLOVENIA) ESSENTIAL OIL - 11273

Peak	RT (min)	Compound name	%
31	25,7	1-OCTEN-3-OL	0,01
32	26,4	alpha-CUBEBENE	0,43
33	26,6	Trans-THUYANOL	0,11
34	26,7	EPOXY-4,8-TERPINOLENE	0,01
35	26,9	SESQUITERPENE	0,02
36	27,1	ELEMENE ISOMER	0,03
37	27,7	delta-ELEMENE	0,02
38	17,9	YLANGENE	0,01
39	28,2	SESQUITERPENE	0,01
40	28,4	alpha-COPAENE	0,21
41	30,5	E-SOLANONE	0,03
42	30,7	ALIPHATIC ESTER	0,03
43	31,3	beta1-CUBEBENE	0,06
44	31,6	Cis-THUYANOL	0,08
45	31,7	LINALOOL	0,07
46	32,0	BERGAMOTENE ISOMER	0,07
47	32,5	Trans-p-MENTH-2-EN-1-OL	0,06
48	32,8	METHYL CITRONNELLATE	0,04
49	33,0	SESQUITERPENE	0,03
50	33,4	epsilon-CADINENE	0,04
51	33,7	BORNYL ACETATE	0,24
52	34,0	ISOBORNYL ACETATE	0,02
53	34,2	alpha-trans-BERGAMOTENE	0,01
54	34,5	beta-ELEMENE	1,27
55	34,8	beta-CARYOPHYLLENE	1,74
56	35,0	TERPINENE-4-OL	1,22
57	35,4	SESQUITERPENE	0,02
58	35,8	THUJOPSENE	0,02
59	36,2	SESQUITERPENE	0,01
60	36,4	MYRTENAL	0,03

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: JUNIPER BERRY (SLOVENIA) ESSENTIAL OIL - 11273

Peak	RT (min)	Compound name	%
61	36,5	Cis-p-MENTH-2-EN-1-OL	0,04
62	36,9	CADINA-3,5-DIENE	0,03
63	37,3	GERMACRENE A	0,54
64	38,1	Trans-PINOCARVEOL	0,03
65	38,6	ZONARENE	0,03
66	38,7	CITRONELLYL ACETATE	0,07
67	39,1	E-beta-FARNESENE	0,66
68	39,2	alpha-HUMULENE	1,07
69	39,5	gamma-SELINENE	0,07
70	40,2	SESQUITERPENE	0,06
71	40,3	gamma-MUUROLENE	0,24
72	40,7	TERPENYL ACETATE + alpha-TERPINEOL	0,27
73	40,9	BORNEOL	0,03
74	41,5	GERMACRENE D	4,97
75	41,7	MUUROLADIENE ISOMER	0,06
76	41,8	SESQUITERPENE	0,03
77	42,0	beta-SELINENE	0,21
78	42,3	alpha-SELINENE	0,15
79	42,4	alpha-MUUROLENE	0,26
80	42,6	SESQUITERPENE	0,04
81	42,8	BICYCLOGERMACRENE	0,49
82	43,1	SESQUITERPENE	0,02
83	43,4	Cis-PIPERITOL	0,02
84	43,6	SESQUITERPENE	0,03
85	44,3	delta-CADINENE	1,30
86	44,5	gamma-CADINENE	0,08
87	44,7	CITRONELLOL	0,05
88	45,4	SELINA-3,7-DIENE	0,07
89	45,6	CADINA-1,4-DIENE	0,03
90	46,1	SESQUITERPENE	0,01

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: JUNIPER BERRY (SLOVENIA) ESSENTIAL OIL - 11273

Peak	RT (min)	Compound name	%
91	46,3	alpha-AMORPHENE	0,06
92	48,3	GERMACRENE B	2,26
93	48,5	CALAMENENE	0,02
94	49,3	GERANIOL	0,08
95	49,5	p-CYMENE-8-OL	0,04
96	51,4	CUBEBOL	0,02
97	54,2	SESQUITERPENIC OXIDE	0,02
98	56,4	CARYOPHYLLENE EPOXIDE	0,04
99	59,4	Époxy-6,7-HUMULENE	0,03
100	59,6	NEROLIDOL	0,02
101	60,0	GERMACRA-1,5-DIEN-4-OL	0,11
102	60,4	Epi-CUBENOL	0,01
103	60,7	CUBENOL	0,02
104	61,5	ELEMOL	0,02
105	61,9	SESQUITERPENOL	0,08
106	63,6	SPATHULENOL	0,09
107	66,0	T-CADINOL	0,05
108	66,8	alpha-MUUROLOL	0,05
109	66,9	SESQUITERPENOL	0,01
110	67,8	delta-CADINOL	0,02
111	67,9	GERANYLGERANIADIENE ISOMER Mw=272	0,03
112	68,8	beta-EUDESMOL	0,01
113	68,9	alpha-CADINOL	0,08
114	69,5	GERANYLGERANIADIENE ISOMER Mw=272	0,02
115	69,9	beta-NOOTKATOL	0,04
116	70,0	CITRONELIC ACID	0,01
117	73,3	DITERPENE Mw=272	0,02
118	74,6	AROMATIC COMPOUND	0,01
		TOTAL	99,82

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.