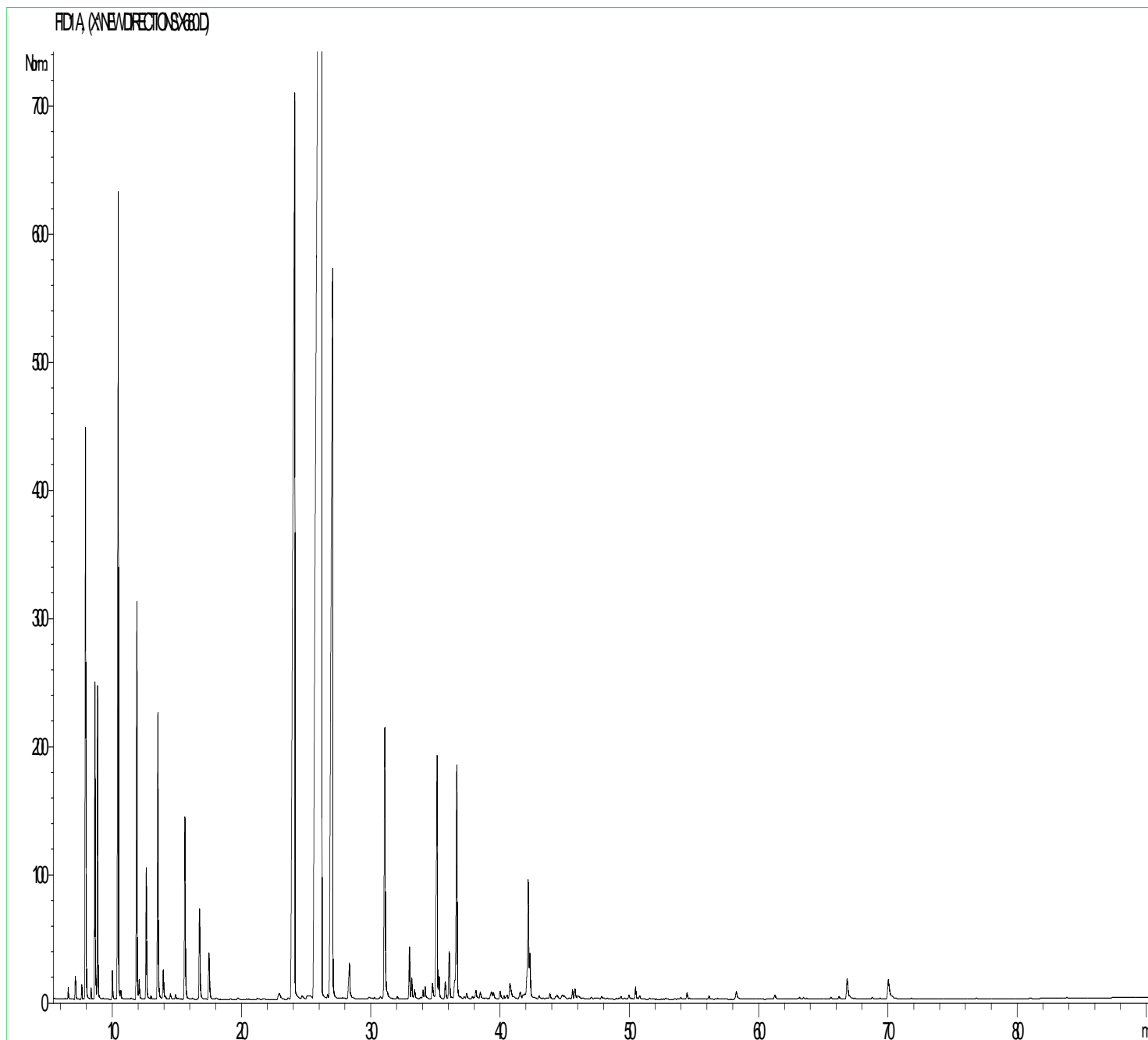


GCMS ANALYSIS

PRODUCT NAME: CEDAR LEAF THUJA ESSENTIAL OIL - 11026

DATE: June 7, 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: CEDAR LEAF THUJA ESSENTIAL OIL - 11026

Peak	RT (min)	Compound	%
1	6,3	ISOVALERALDEHYDE	0,01
2	6,6	Z-SALVENE	0,03
3	6,7	TERPENE ISOMERE	0,01
4	7,1	BORNYLENE	0,08
5	7,2	BICYCLOOCT-2-EN-8-ONE, 3-METHYL	0,05
6	7,6	TRICYCLENE	0,06
7	7,9	alpha-PINENE	2,34
8	8,0	alpha-THUYENE	0,70
9	8,3	ETHYL 2-METHYLBUTYRATE	0,05
10	8,6	alpha-FENCHENE	1,33
11	8,7	ETHYL 3-METHYLBUTYRATE	0,08
12	8,8	CAMPHENE	1,39
13	10,0	beta-PINENE	0,14
14	10,5	SABINENE	4,25
15	10,6	PINADIENE	0,05
16	11,9	beta-MYRCENE	1,95
17	12,0	alpha-PHELLANDRENE	0,13
18	12,6	alpha-TERPINENE	0,72
19	13,0	2,3-DEHYDRO-1,8-CINEOLE	0,02
20	13,5	LIMONENE	1,65
21	13,9	beta-PHELLANDRENE	0,20
22	14,1	MENTHATRIENE ISOMER	0,02
23	14,5	ETHYL DIMETHYLACRYLATE	0,03
24	14,9	ETHYL CAPROATE	0,03
25	15,6	gamma-TERPINENE	1,16
26	16,7	p-CYMENE	0,61
27	17,5	TERPINOLENE	0,35
28	18,0	ETHYL 2-PENTENOATE	0,01
29	19,7	PINOL	0,01
30	22,9	ALIPHATIC ESTER	0,10

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GCMS ANALYSIS (cont'd.)

PRODUCT NAME: CEDAR LEAF THUJA ESSENTIAL OIL - 11026

Peak	RT (min)	Compound	%
31	23,6	3-HEXEN-1-OL	0,01
32	24,1	FENCHONE	12,18
33	24,6	o-METHYLANISOLE	0,04
34	25,0	2-HEXEN-1-OL	0,03
35	25,2	PERILLENE	0,08
36	26,2	alpha-THUYONE	49,50
37	26,6	alpha,p-DIMETHYLSTYRENE	0,03
38	27,0	beta-THUYONE	8,64
39	27,1	1-OCTEN-3-OL	0,08
40	28,2	Trans-THUYANOL	0,06
41	28,3	FENCHYL ACETATE	0,23
42	28,4	ETHYL SORBATE	0,03
43	29,8	ALDEHYDE alpha-CAMPHOLENE	0,02
44	30,7	alpha-COPAENE + TERPENIC KETONE	0,02
45	31,0	CAMPHOR	2,05
46	31,2	6-CAMPHENONE	0,09
47	32,0	AROMATIC COMPOUND	0,02
48	32,9	E-SOLANONE	0,31
49	33,1	Cis-THUYANOL	0,09
50	33,4	LINALOOL	0,14
51	34,0	LINALYL ACETATE + Trans-p-MENTH-2-EN-1-OL	0,07
52	34,2	Trans-ISOPULEGONE	0,10
53	34,7	TERPINENE-1-OL	0,14
54	35,1	BORNYL ACETATE	1,83
55	35,2	ISOPULEGONE	0,17
56	35,7	METHYL THYMOL ETHER + TERPENIC ACETATE	0,14
57	36,0	CAMPHENE HYDRATE	0,37
58	36,5	beta-CARYOPHYLLENE	0,15
59	36,6	TERPINENE-4-OL	1,63
60	36,9	TERPENIC KETONE	0,03

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GCMS ANALYSIS (cont'd.)

PRODUCT NAME: CEDAR LEAF THUJA ESSENTIAL OIL - 11026

Peak	RT (min)	Compound	%
61	37,2	6,9-GUAIADIENE	0,02
62	37,4	TERPENIC ACETATE	0,05
63	37,8	MYRTENAL	0,03
64	38,0	COMPOUND Mw=152	0,01
65	38,1	SABINACETONE	0,09
66	38,5	Cis-p-MENTH-2-EN-1-OL	0,07
67	39,3	PULEGONE	0,08
68	39,5	Trans-SABINYL ACETATE + Trans-PINOCARVEOL	0,07
69	39,9	THUYYLIC ALCOHOL ISOMER	0,04
70	40,0	ESTRAGOL	0,04
71	40,2	CITRONELLYL ACETATE	0,02
72	40,5	alpha-HUMULENE	0,02
73	40,6	TERPENIC ACETATE	0,02
74	40,7	THUYYLIC ALCOHOL ISOMER	0,12
75	40,8	CARVOTANACETONE	0,09
76	41,0	TERPENIC ACETATE	0,03
77	41,5	MYRTENYL ACETATE	0,08
78	41,7	gamma-MUUROLENE	0,02
79	41,8	TERPENIC ESTER	0,03
80	41,9	TERPENIC ESTER	0,04
81	42,0	TERPENYL ACETATE	0,89
82	42,1	alpha-TERPINEOL	0,36
83	42,2	BORNEOL	0,13
84	42,6	COMPOUND Mw=152	0,03
85	43,0	GERMACRENE D	0,04
86	43,3	SESQUITERPENE	0,01
87	43,6	SESQUITERPENE	0,02
88	43,8	PIPERITONE	0,05
89	44,2	MENTHADIENOL ISOMER	0,02
90	44,4	alpha-MUUROLENE + TERPENIC ACETATE	0,05

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GCMS ANALYSIS (cont'd.)

PRODUCT NAME: CEDAR LEAF THUJA ESSENTIAL OIL - 11026

Peak	RT (min)	Compound	%
91	44,8	trans-PIPERITOL	0,05
92	44,9	Trans-ISOPIPERITENOL	0,04
93	45,3	SESQUITERPENE	0,01
94	45,4	alpha-FARNESENE	0,01
95	45,5	delta-CADINENE	0,08
96	45,7	gamma-CADINENE	0,05
97	46,0	METHYLACETOPHENONE	0,02
98	46,1	CITRONELLOL	0,01
99	46,1	CUMINAL	0,03
100	46,3	MENTHADIENOL ISOMER	0,01
101	46,4	MENTHADIENOL ISOMER	0,01
102	47,0	p-MENTH-1,3-DIEN-7-AL	0,02
103	47,3	SESQUITERPENE	0,02
104	47,5	alpha-AMORPHENE	0,02
105	47,8	MYRTENOL	0,03
106	48,0	CAMPHOLENOL	0,01
107	48,2	NEROL	0,01
108	48,9	ALIPHATIC ESTER	0,01
109	49,1	AROMATIC COMPOUND	0,01
110	49,3	2-TRIDECANONE	0,02
111	49,6	MENTHADIENOL ISOMER	0,01
112	49,9	Trans-CARVEOL	0,04
113	50,1	3,5-DIMETHOXYTOLUENE	0,01
114	50,4	p-CYMENE-8-OL	0,09
115	50,7	ETHYL, 2,4-DECADIENOATE	0,03
116	51,5	Cis-CARVEOL + AROMATIC COMPOUND	0,01
117	52,7	ISOPROPYL METHYLHEPTADIENOL	0,01
118	53,9	HYDROXY ACETATE CYCLOALKYL COMPOUND	0,01
119	54,4	HYDROXY TERPENIC ESTER	0,05
120	54,6	TERPENIC ESTER	0,01

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GCMS ANALYSIS (cont'd.)

PRODUCT NAME: CEDAR LEAF THUJA ESSENTIAL OIL - 11026

Peak	RT (min)	Compound	%
121	55,4	TERPENIC ESTER	0,01
122	55,8	TERPENIC ESTER	0,01
123	56,1	TERPENIC ACETATE	0,03
124	56,8	AROMATIC COMPOUND	0,01
125	57,4	FUROPELARGON	0,01
126	58,2	CARYOPHYLLENE EPOXIDE	0,08
127	61,2	EPOXY-6,7-HUMULENE	0,04
128	63,1	ALIPHATIC ALCOHOL	0,02
129	63,4	FUROPELARGON ISOMER + CUMINOL	0,02
130	63,6	SESQUITERPENIC EPOXIDE	0,01
131	65,5	ETHYL CINNAMATE	0,02
132	66,2	CINNAMYL ACETATE	0,03
133	66,8	RIMUENE Mw=272	0,24
134	68,7	T-CADINOL	0,02
135	70,0	BEYERENE	0,25
136	70,2	DITERPENE Mw=272	0,03
137	83,8	10-HYDROXYOPLOPANONE	0,01
		TOTAL	99,99

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