



PLANT THERAPY

100% PURE ESSENTIAL OILS

GC/MS BATCH NUMBER: C70100

ESSENTIAL OIL: CEDARWOOD VIRGINIAN
BOTANICAL NAME: CEDARWOOD VIRGINIAN
ORIGIN: USA

KEY CONSTITUENTS IN THIS BATCH OF CEDARWOOD VIRGINIAN OIL	%
THUJOPSENE	25.2
α -CEDRENE	21.7
CEDROL	20.3
β -CEDRENE	5.0
WIDDROL	2.9
UNIDENTIFIED CEDRENE ISOMER	1.8
CUPARENE	1.6
β -CURCUMENE + CHAMIGRENE ISOMER	1.5
β -HIMACHALENE	1.1

Comments from Robert Tisserand: The analysis shows a good quality Virginian cedarwood, oil, and the odor is characteristically dry and woody.

CUSTOMER :

**PLANT THERAPY
126 Locust Street South
Twin Falls, ID 83 301
USA**

Sample nature: ESSENTIAL OIL
Botanical species: JUNIPERUS VIRGINIANA
Reference name: CEDARWOOD
Batch number: C70100
Origin: USA
Part: WOOD
Pyre^oessences reference: A019
Date of reception: 03/13/2013
Date analysis: 03/21/2014
Packaging: Amber flask of 5 ml – ambient temperature
Analysis: Classic

Validated report by :

Daniel DANTIN



GAS CHROMATOGRAPHY norm NF ISO 11024

Analysis conditions :

CPG 6890 / MS 5973 – Column : : HP INNOWAX polar 60 m × 0,25 mm × 0,5 µm

CPG 5890 FID - Column : : HP INNOWAX polar 60 m × 0,25 mm × 0,5 µm

Temperature program : 6 mn to 60 °C –2 °C/mn→250 °C - 20mn to 250 °C

Carrier gas He : 23 psis/MS – 30 psis/FID

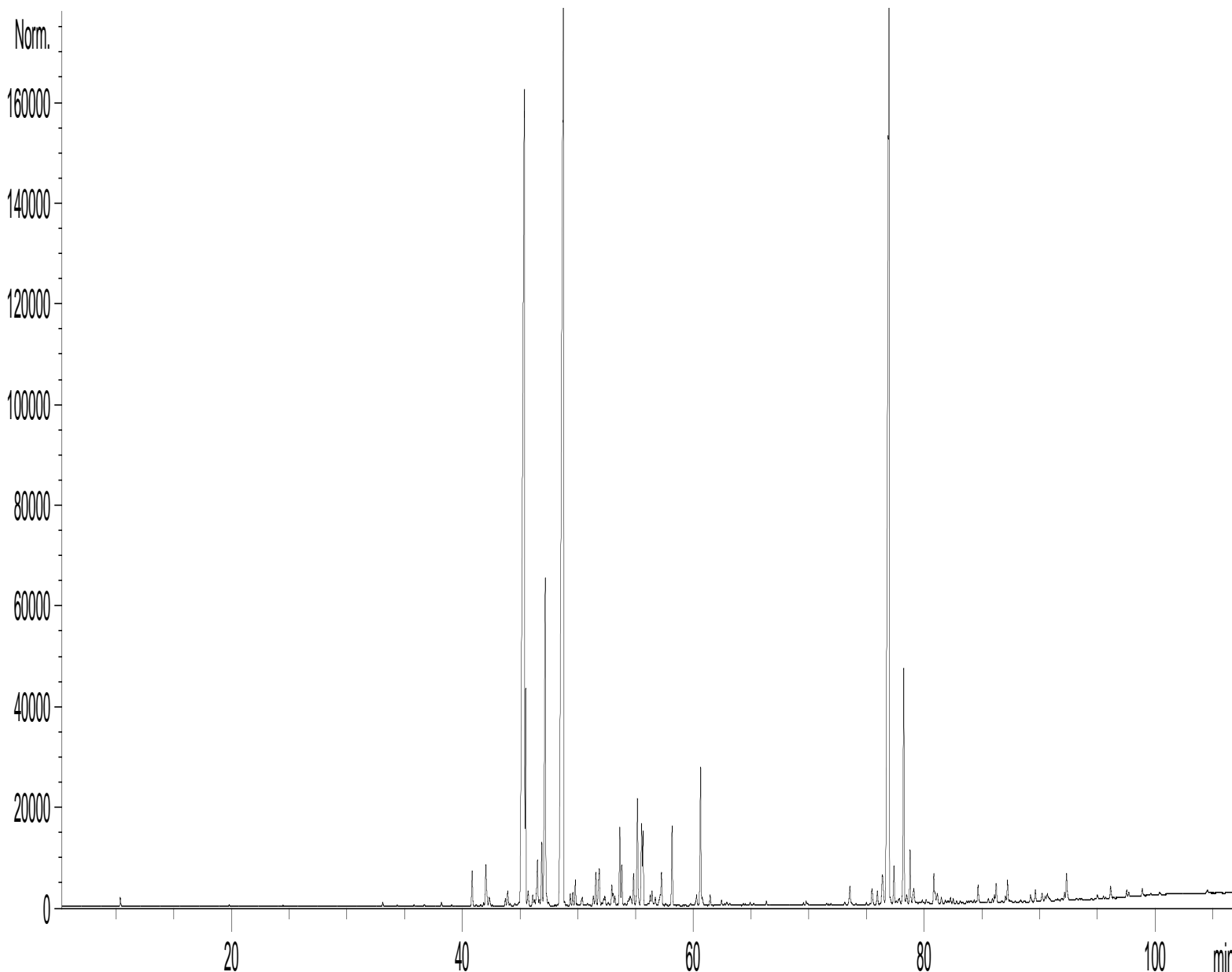
Sample injection / split : 1 µl of 10 % solution in hexane,

Mass range : 30 to 350, Oil components are identified by a combination of retention times
(our own database) and mass spectra library NKS 75 000 records,

Percentages are calculated from GC/FID peaks areas without using corrections factors,

Chromatographic profile (GC/FID)

FID1 A, (PLANTHERICAVIA019.D)



Identification results 1 : CEDARWOOD BATCH C70100

Peak	RT (min)	Compound name	%	Norm	Allergens
1	10,4	α -PINENE	0,08		
2	19,8	LIMONENE	0,01		0,01
3	33,1	SESQUITERPENE	0,04		
4	35,8	α , ρ -DIMETHYLSTYRENE	0,01		
5	36,7	SESQUITERPENE	0,02		
6	38,2	δ -ELEMENE	0,04		
7	40,8	CEDRENE ISOMER	0,43		
8	41,8	α -ISOCOMENE	0,04		
9	42,0	CEDRENE ISOMER	0,62		
10	42,3	β -BERGAMOTENE ISOMER	0,14		
11	43,7	BERGAMOTENE ISOMER	0,08		
12	43,9	CEDRENE ISOMER	0,22		
13	45,4	α-CEDRENE	21,72		
14	45,5	CEDRENE ISOMER	1,82		
15	45,7	SESQUITERPENE	0,23		
16	46,1	α -GUAIENE	0,15		
17	46,2	GURJUNENE ISOMER	0,07		
18	46,5	β -CARYOPHYLLENE	0,68		
19	46,7	SESQUITERPENE	0,08		
20	46,9	MUUROLENE ISOMER	0,78		
21	47,2	β-CEDRENE	4,97		
22	48,7	THUYOPSENE	25,24		
23	49,3	PREZIZA-7-ENE	0,13		
24	49,6	SESQUITERPENE Mw=202	0,16		
25	49,8	α -HIMACHALENE	0,29		
26	50,4	E- β -FARNESENE	0,16		
27	50,8	γ -GURJUNENE	0,03		
28	51,3	CURCUMENE ISOMER	0,14		
29	51,6	ACORADIENE ISOMER	0,41		
30	51,8	CURCUMENE ISOMER	0,25		
31	51,9	γ -CURCUMENE	0,38		
32	52,1	CURCUMENE ISOMER	0,04		
33	52,2	SESQUITERPENE Mw=202	0,09		
34	52,3	α -TERPINEOL	0,13		
35	52,9	γ -HIMACHALENE	0,27		
36	53,1	CHAMIGRENE ISOMER	0,13		
37	53,2	LONGIPINENE ISOMER	0,12		
38	53,6	β -CHAMIGRENE	0,94		
39	53,8	HIMACHALENE ISOMER	0,50		
40	54,1	SESQUITERPENE	0,05		
41	54,4	SESQUITERPENE	0,12		
42	54,5	β -SELINENE	0,12		
43	54,6	α -SELINENE	0,08		
44	54,8	CHAMIGRENE ISOMER	0,40		
45	55,2	β -CURCUMENE + CHAMIGRENE ISOMER	1,46		

Identification results 2 : CEDARWOOD BATCH C70100

Peak	RT (min)	Compound name	%	Norm	Allergens
46	55,5	β-HIMACHALENE	1,10		
47	55,7	α-CHAMIGRENE	0,80		
48	56,3	FARNESENE ISOMER	0,14		
49	56,4	SESQUITERPENE	0,21		
50	56,7	ALIPHATIC COMPOUND	0,13		
51	57,0	FARNESENE ISOMER	0,07		
52	57,1	α-CURCUMENE	0,11		
53	57,2	ELEMENE ISOMER	0,41		
54	57,6	SESQUITERPENE	0,04		
55	58,2	ISOTHUYOPSENE	0,98		
56	60,3	ALKYL COMPOUND	0,16		
57	60,6	CUPARENE	1,60		
58	60,8	ALKYL COMPOUND	0,11		
59	61,5	AROMATIC COMPOUND	0,13		
60	62,4	AROMATIC COMPOUND	0,06		
61	62,9	COMPOUND Mw=220	0,04		
62	64,3	COMPOUND Mw=220	0,02		
63	64,9	COMPOUND Mw=220	0,03		
64	66,3	COMPOUND Mw=220	0,05		
65	68,4	SESQUITERPENOL	0,01		
66	69,5	SESQUITERPENOL Mw=222	0,03		
67	69,8	CARYOPHYLLENE EPOXYDE	0,03		
68	71,9	SESQUITERPENOL Mw=222	0,02		
69	73,1	SESQUITERPENOL Mw=222	0,04		
70	73,6	CEDRENOL ISOMER	0,29		
71	75,5	CEDRENOL ISOMER	0,25		
72	75,9	SESQUITERPENOL Mw=222	0,17		
73	76,4	SESQUITERPENOL Mw=222	0,54		
74	76,9	CEDROL	20,25		
75	77,4	SESQUITERPENOL	0,42		
76	77,7	CEDRENOL ISOMER	0,03		
77	77,9	SESQUITERPENOL Mw=222	0,04		
78	78,2	WIDDROL	2,94		
79	78,5	SESQUITERPENOL Mw=220	0,10		
80	78,8	CEDROL ISOMER	0,63		
81	79,1	SESQUITERPENIC EPOXYDE	0,26		
82	79,8	SESQUITERPENONE Mw=218	0,03		
83	80,2	CARVACROL	0,04		
84	80,8	α-BISABOLOL	0,31		
85	80,9	HIMACHALOL ISOMER	0,09		
86	81,1	SESQUITERPENONE Mw=218	0,11		
87	81,5	AROMATIC SESQUITERPENOL Mw=220	0,09		
88	81,8	SESQUITERPENOL Mw=222	0,03		
89	82,3	SESQUITERPENOL Mw=222	0,06		
90	82,5	SESQUITERPENOL Mw=222	0,05		

Identification results 3 : CEDARWOOD BATCH C70100

Peak	RT (min)	Compound name	%	Norm	Allergens
91	82,8	EUDESMA-7-EN-4-OL	0,03		
92	84,1	AROMATIC SESQUITERPENOL Mw=222	0,03		
93	84,7	CURCUMENIC SESQUITERPENIC COMPOUND	0,25		
94	85,6	SESQUITERPENOL Mw=222	0,05		
95	86,1	SESQUITERPENOL Mw=220	0,08		
96	86,2	SOLAVETIVONE Mw=218	0,25		
97	87,0	SESQUITERPENOL Mw=222	0,05		
98	87,2	SESQUITERPENIC EPOXYDE	0,24		
99	88,4	SESQUITERPENIC COMPOUND	0,03		
100	89,2	SESQUITERPENOL Mw=222	0,10		
101	89,6	COMPOUND Mw=220	0,16		
102	90,2	ALIPHATIC COMPOUND	0,11		
103	90,5	BERGAMOTOL ISOMER	0,03		
104	90,6	COMPOUND Mw=220	0,08		
105	90,8	COMPOUND Mw=220	0,04		
106	92,2	SESQUITERPENIC COMPOUND Mw=220	0,05		
107	92,3	SESQUITERPENOL Mw=220	0,31		
108	95,0	AROMATIC COMPOUND	0,06		
109	95,5	COMPOUND Mw=220	0,03		
110	96,1	NOOTKATONE	0,16		
111	97,5	SESQUITERPENOL Mw=220	0,06		
112	97,7	SESQUITERPENOL Mw=222	0,05		
113	98,9	SESQUITERPENOL Mw=220	0,11		
114	99,6	ALIPHATIC COMPOUND	0,02		
115	100,4	SESQUITERPENOL Mw=220	0,04		
116	104,5	AROMATIC COMPOUND Mw=218	0,04		
		TOTAL	99,38		0,01