

GC/MS BATCH NUMBER: V30100

ESSENTIAL OIL: VETIVER
BOTANICAL NAME: VETIVERIA ZIZANOIDES
ORIGIN: HAITI

KEY CONSTITUENTS PRESENT IN THIS BATCH OF VETIVER OIL	%
KHUSIMOL	13.6
Trans-ISOVALENCENOL	12.4
VETISELINENOL	5.9
α -CADINOL	5.4
ZIZANOL	4.7
α -VETIVONE	4.1
SELINA-6-EN-4-OL ISOMER	3.9
β -VETIVONE	3.5
Epi-EUDESOL ISOMER	3.2
EUDESMENOL	2.7
β -VETIVENENE	2.3
Epi-EUDESOL ISOMER	2.3
CYCLOCOPACAMPHENOL	2.1
NOOTKATOL ISOMER	2.0
JUNIPER CAMPHOR	1.8
α -AMORPHENE	1.5
α -ELEMOL	1.0
β -VETISPIRENE	1.0

Comments from Robert Tisserand:
Characteristic of rich, deep Haitian vetiver oil, with expected complexity and key constituents.

Sample Information

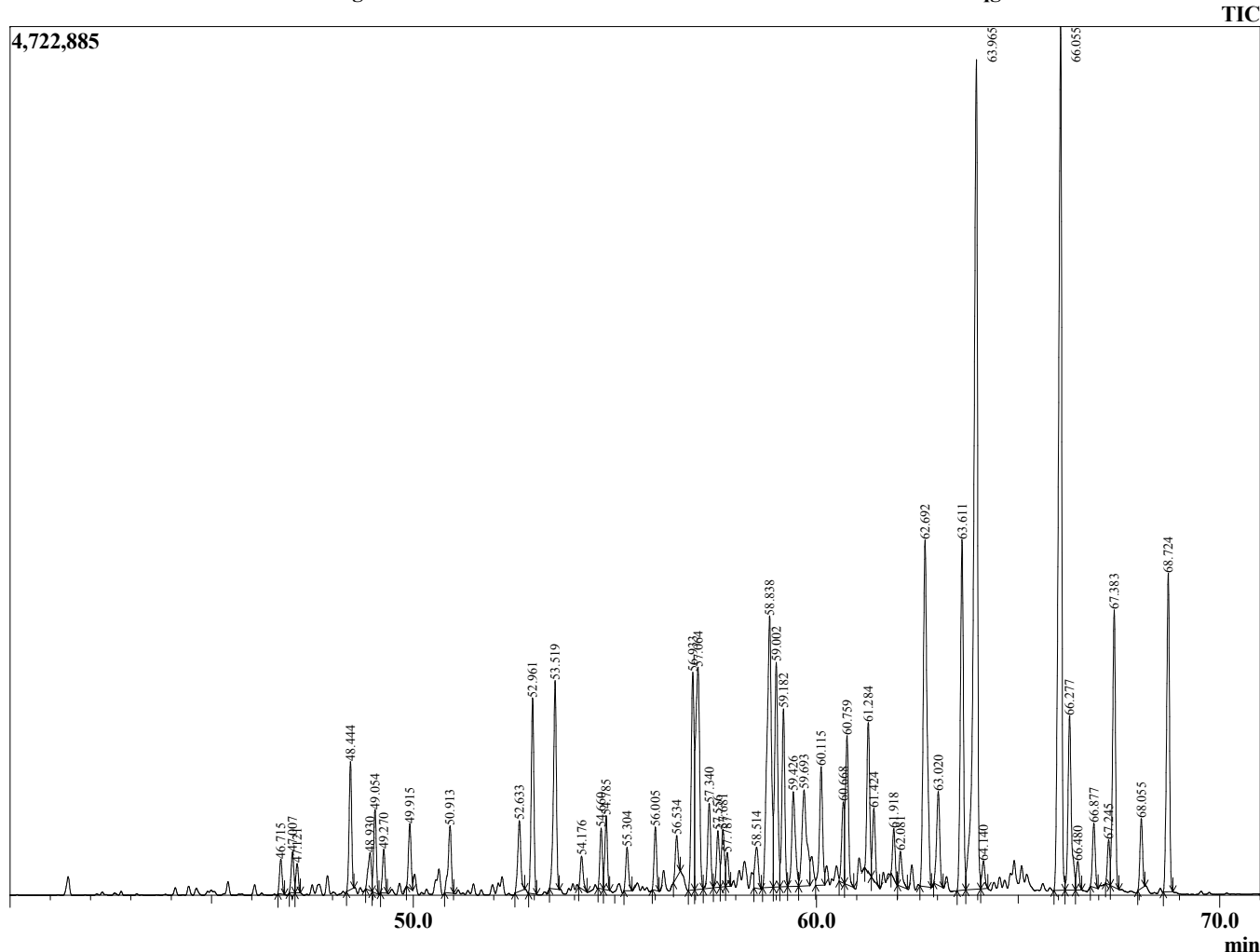
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 1/13/2015 11:07:01 PM
 Sample Type : Essential Oil
 Sample Name : Vetiver
 Sample ID : 97937-4
 Injection Volume : 0.10
 Data File : C:\GCMSsolution\Data\EOU\Vetiver\Vetiver 97937-4.qgd



Peak Report TIC

R.Time	Name	Area%
46.715	Prezizaene	0.39
47.007	Khusimene	0.48
47.121	Gurjunene isomer	0.32
48.444	Amorphene <alpha>	1.46
48.930	Selinene <delta>	0.56
49.054	Vetispirene <beta>	0.95
49.270	Amorphene <gamma>	0.50
49.915	Epizonarene	0.74
50.913	Guaine <beta>	0.94
52.633	Elemol <alpha>	0.97
52.961	Vetivenene <beta>	2.34
53.519	Eudesmenol	2.72
54.176	Uvetiver	0.41
54.660	Unidentified	0.69
54.785	Uvetiver	0.83
55.304	Khusimone	0.54
56.005	Uvetiver	0.72
56.534	Uvetiver	0.50
56.933	Uvetiver	2.83
57.064	Selina-6-en-4-ol <isomer>	3.86
57.340	Uvetiver	1.16
57.556	Rosifoliol isomer	0.74
57.681	Cadin-4-en-7-ol <cis>	0.77
57.787	Vetivo spirool	0.37
58.514	Murrolol epi beta+Unknown	0.64
58.838	Cadinol <alpha>	5.35
59.002	Eudesmol epi isomer	3.15
59.182	Eudesmol epi isomer	2.28
59.426	Spiro isomer of vetiver	1.54
59.693	Cyclocopacampfenol	2.08
60.115	Uvetiver	1.62
60.668	Zizanal	0.97
60.759	Nootkatol <isomer>	1.97
61.284	Juniper camphor	1.83
61.424	Amorphadienol isomer	0.88
61.918	Vetiver<1706,43>	0.55
62.081	Nootkatol	0.47
62.692	Vetiselinenol	5.86
63.020	Uvetiver	1.32
63.611	Zizanal	4.68
63.965	Khusimol	13.57
64.140	Cyclocolorenone	0.36
66.055	Isovalencenol <trans>	12.44
66.277	Uvetiver	2.60
66.480	Cedrandiol	0.36
66.877	Nootkatone	0.79
67.245	Nootkatone isomer	0.50
67.383	Vetivone <beta>	3.52
68.055	Uvetiver	0.82
68.724	Vetivone <alpha>	4.08
		100.00

Chromatogram Vetiver C:\GCMSsolution\Data\EOU\Vetiver\Vetiver 97937-4.qgd



Comments:

Typical Ranges of Main Components: