

Sample Information

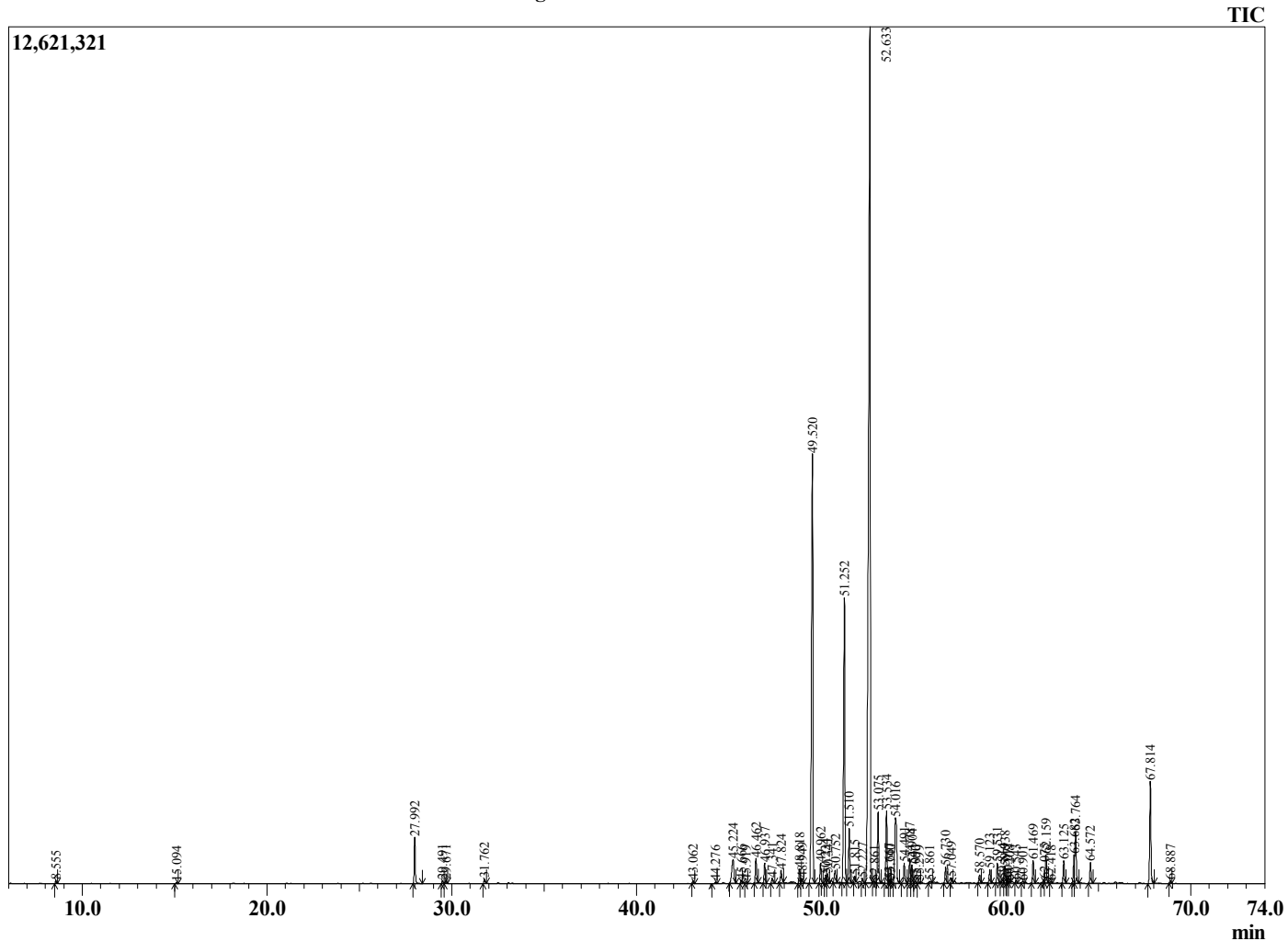
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 12/13/2019 7:21:56 PM
 Sample Type : Essential Oil
 Sample Name : Cedarwood Atlas - Barefut
 Sample ID : 0103
 Injection Volume : 0.10
 Instrument ID : GC-2



Peak Report TIC

R.Time	Name	Area%
8.555	Mesityl oxide	0.06
15.094	alpha-Pinene	0.03
27.992	4-Acetyl-1-methylcyclohexene	1.34
29.491	Unidentified	0.08
29.671	Unidentified	0.08
31.762	4-methyl-Acetophenone	0.13
43.062	alpha-Longipinene	0.09
44.276	Isolodene	0.06
45.224	Unidentified	1.38
45.666	2,4-Patchouladiene	0.10
45.919	Unidentified	0.07
46.462	alpha-Gurjunene	0.82
46.937	Junipene	0.64
47.341	Unidentified	0.18
47.824	Himachala-2,4-diene	0.47
48.818	E-Vestitenone	0.47
48.949	Unidentified	0.16
49.520	alpha-Himachalene	15.98
49.962	Unidentified	0.65
50.234	Unidentified	0.26
50.341	Unidentified	0.31
50.752	alpha-Neocallitropsene	0.50
51.252	gamma-Himachalene	10.06
51.510	11-alpha-Himachala-1,4-diene	1.72
51.815	Z-4,10-epoxy-Amorphane	0.18
52.227	Unidentified	0.14
52.633	beta-Himachalene	40.66
52.861	Unidentified	0.06
53.075	alpha-dehydro-Ar-Himachalene	2.38
53.534	delta-Cadinene	2.32
53.667	cis-Calamenene	0.13
53.740	Unidentified	0.08
54.016	gamma-dehydro-Ar-Himachalene	3.55
54.491	gamma-Vetivenene	0.74
54.787	E-alpha-Bisabolene	0.80
54.904	alpha-Calacorene	0.61
55.090	Longiverbenone	0.07
55.299	Germacrene B	0.06
55.861	Unidentified	0.09
56.730	Himachalene epoxide	0.51
57.049	Unidentified	0.16
58.570	Longiborneol	0.26
59.123	beta-Himachalene oxide	0.46
59.531	Isolongifolol	0.66
59.814	Unidentified	0.10
59.938	1-epi-Cubanol	0.56
60.071	Unidentified	0.13
60.208	Calamen-1-ol	0.03
60.543	Unidentified	0.07
60.901	Unidentified	0.07
61.469	beta-Himachalol	0.75
62.075	Unidentified	0.13
62.159	Z-gamma-Atlantone	1.01
62.418	Cadalene	0.06
63.125	allo-Himachalol	0.72
63.682	(4R,8R)-Deodarone	0.81
63.764	(4R,8S)-Deodarone	1.91
64.572	Z-alpha-Atlantone	0.67
67.814	E-alpha-Atlantone	3.35
68.887	Unidentified	0.08
		100.00

Chromatogram Cedarwood Atlas - Barefut



Comments:

The analysis of this Cedarwood Atlas batch sample meets the expected chemical profile for authentic essential oil of *Cedrus atlantica*. No contamination or adulteration was detected. The results provided in this GCMS quality analysis reflect the chemical composition of the oil and lot referenced above on the date of analysis.