

Sample Information

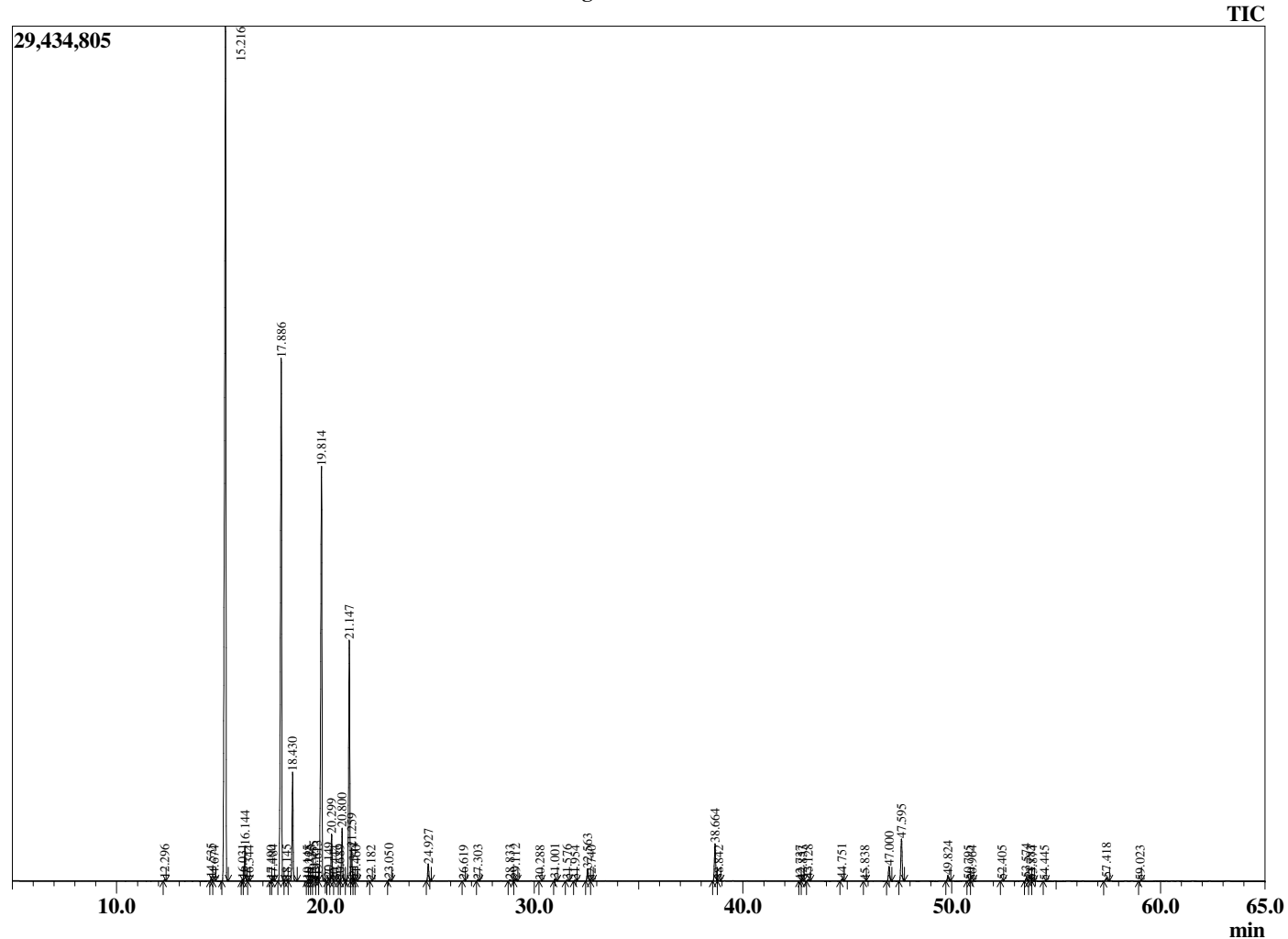
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 7/27/2019 11:34:14 AM
 Sample Type : Essential Oil
 Sample Name : Pine Oil - Revive
 Sample ID : DOB1127L
 Injection Volume : 0.10
 Instrument ID : GC-2



Peak Report TIC

R.Time	Name	Area%
12.296	Santene	0.04
14.535	Tricyclene	0.09
14.674	alpha-Thujene	0.02
15.216	alpha-Pinene	37.88
16.031	alpha-Fenchene	0.05
16.144	Camphene	1.09
16.344	Thuja-2,4(10)diene	0.03
17.400	Unidentified	0.02
17.484	Sabinene	0.04
17.886	beta-Pinene	20.66
18.145	Camphene	0.05
18.430	Myrcene	3.55
19.145	2-Carene	0.02
19.225	1-para-Menthene	0.04
19.335	Unidentified	0.01
19.455	Pseudolimonene	0.17
19.613	alpha-Phellandrene	0.19
19.814	delta-3-Carene	16.20
20.149	1,4-Cineole	0.11
20.299	alpha-Terpinene	1.59
20.444	ortho-Cymene	0.02
20.689	Unidentified	0.03
20.800	para-Cymene	1.86
21.147	Limonene	8.74
21.259	beta-Phellandrene	1.05
21.344	1,8-Cineole	0.10
21.460	cis-beta-Ocimene	0.02
22.182	trans-beta-Ocimene	0.01
23.050	gamma-Terpinene	0.06
24.927	Terpinolene	0.62
26.619	Unidentified	0.02
27.303	alpha-Fenchol	0.04
28.833	trans-Pinocarveol	0.07
29.112	trans-Verbenol	0.07
30.288	Unidentified	0.01
31.001	Borneol	0.08
31.576	Terpinen-4-ol	0.04
31.954	para-Cymen-8-ol	0.03
32.563	alpha-Terpineol	0.52
32.740	Estragole	0.01
38.664	Bornyl acetate	1.49
38.842	Isobornyl acetate	0.02
42.737	alpha-Terpinyl acetate	0.02
42.853	alpha-Cubebene	0.03
43.128	alpha-Longipinene	0.06
44.751	alpha-Copaene	0.10
45.838	Sativene	0.01
47.000	Junipene	0.63
47.595	beta-Caryophyllene	1.77
49.824	alpha-Humulene	0.22
50.795	10-beta-H-Cadina-1(6),4-diene	0.02
50.964	trans-Cadina-1(6),4-diene	0.02
52.405	alpha-Muurolene	0.02
53.574	delta-Cadinene	0.11
53.783	cis-Calamenene	0.03
53.874	Zonarene	0.02
54.445	trans-Cadine-1,4-diene	0.01
57.418	Caryophyllene oxide	0.17
59.023	Humulene epoxide II	0.01
		100.00

Chromatogram Pine Oil - Revive



Comments:

The analysis of this Pine Oil, Bulgaria batch sample meets the expected chemical profile for authentic essential oil of *Pinus sylvestris*. 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.