

Sample Information

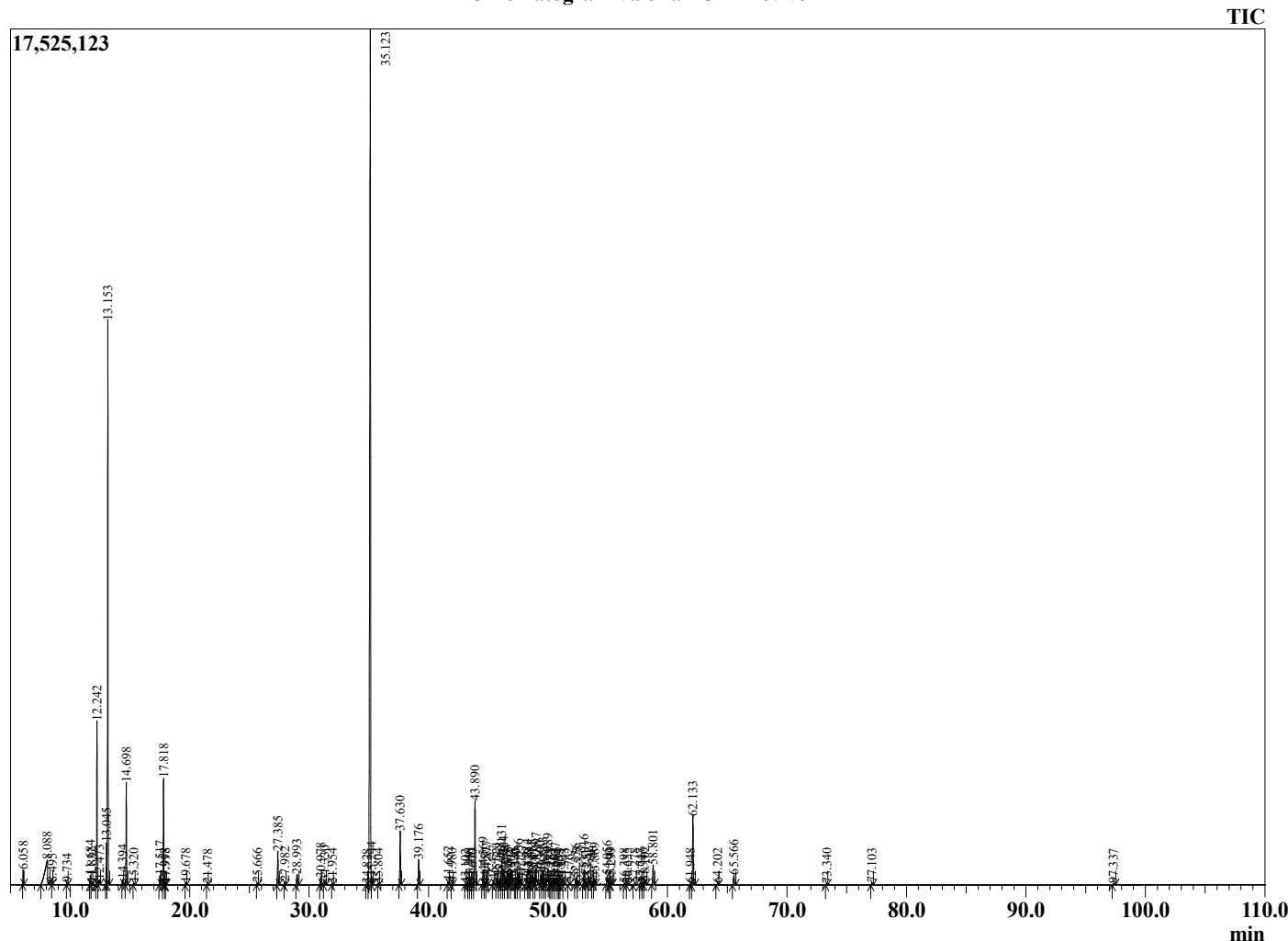
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 10/26/2022 5:24:47 PM
 Sample Type : Essential Oil
 Sample Name : Valerian Oil - Revive
 Sample ID : 1P
 Injection Volume : 0.10
 Instrument ID : GC-4



Peak Report TIC

R.Time	Name	Area%
6.058	methyl-Isovalerate	0.27
8.088	Isolvaleric acid	3.46
8.495	ethyl-Isovalerate	0.04
9.734	Methyl 3-methylpentanoate	0.05
11.684	Tricyclene	0.24
11.832	alpha-Thujene	0.06
12.242	alpha-Pinene	4.42
12.473	3-Methylvaleric acid	0.30
13.045	alpha-Fenchene	1.20
13.153	Camphene	15.84
14.394	Sabinene	0.15
14.698	beta-Pinene	2.93
15.320	Myrcene	0.05
17.517	para-Cymene	0.29
17.818	Limonene	3.35
17.918	beta-Phellandrene	0.04
17.998	1,8-Cineole	0.04
19.678	gamma-Terpinene	0.07
21.478	Terpinolene	0.03
25.666	Camphor	0.06
27.385	Borneol	1.21
27.982	Terpinen-4-ol	0.12
28.993	alpha-Terpineol	0.49
30.978	unidentified	0.26
31.330	Methyl thymol ether	0.17
31.954	Carvacol Methyl Ether	0.04
34.828	unidentified	0.05
35.123	Bornyl acetate	40.02
35.244	Isobornyl acetate	0.26
35.804	trans-Pinocarvyl acetate	0.04
37.630	Myrtenyl acetate	2.05
39.176	alpha-Terpinyl acetate	0.98
41.652	beta-Patchoulene	0.14
41.980	beta-Elemene	0.08
43.102	alpha-Gurjunene	0.03
43.348	unidentified	0.05
43.481	Thymohydroquinone dimethyl ether	0.15
43.670	alpha-Cedrene	0.05
43.890	beta-Caryophyllene	3.42
44.569	gamma-Murolene	0.52
44.750	unidentified	0.06
44.877	alpha-Guaiene	0.40
45.437	unidentified	0.17
45.721	Seychellene	0.34
45.968	Valerna-4,7(11)-diene	0.28
46.131	alpha-Humulene	1.08
46.264	unidentified	0.55
46.484	alpha-Patchoulene	0.24
46.675	unidentified	0.08
46.715	unidentified	0.11
46.904	unidentified	0.03
47.230	beta-Chamigrene	0.04
47.349	trans-Cadina-1(6),4-diene	0.09
47.536	trans-beta-Ionone	0.46
47.727	alpha-Curcumene	0.23
48.214	beta-Selinene	0.45
48.330	unidentified	0.03
48.428	trans-Murrola-4(14),5-diene	0.05
48.635	alpha-Selinene	0.54
48.814	alpha-Murolene	0.34
48.997	alpha-Bulnesene	0.88
49.390	Cuparene	0.39

Chromatogram Valerian Oil - Revive



Comments:

The analysis of this Valerian batch sample meets the expected chemical profile for authentic essential oil of *Valeriana officinalis*. 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.

R.Time	Name	Area%
49.563	alpha-Alaskene	0.55
49.681	gamma-Cadinene	0.17
49.989	delta-Cadinene	0.89
50.175	unidentified	0.05
50.263	Zonarene	0.07
50.503	trans-gamma-Bisabolene	0.07
50.627	unidentified	0.31
50.834	trans-Cadina-1,4-diene	0.03
50.952	gamma-Cuprenene	0.03
51.077	unidentified	0.10
51.343	alpha-Calacorene	0.08
51.762	unidentified	0.07
52.336	unidentified	0.27
52.528	Nerolidol	0.18
53.016	Maaliol	0.66
53.251	Citronellyl propionate	0.06
53.427	Spathulenol	0.37
53.740	Caryophyllene oxide	0.13
53.889	unidentified	0.30
54.956	unidentified	0.43
55.190	unidentified	0.05
55.299	Cedrol	0.15
56.398	unidentified	0.06
56.655	unidentified	0.06
57.278	unidentified	0.10
57.747	unidentified	0.12
57.946	alpha-Cadinol	0.07
58.102	Juniper Camphor	0.20
58.801	Patchouli alcohol	0.85
61.948	unidentified	0.07
62.133	Valerenal	2.89
64.202	unidentified	0.06
65.566	unidentified	0.42
73.340	unidentified	0.06
77.103	unidentified	0.09
97.337	Triphenyl-phosphine oxide	0.05
		100.00