

Sample Information

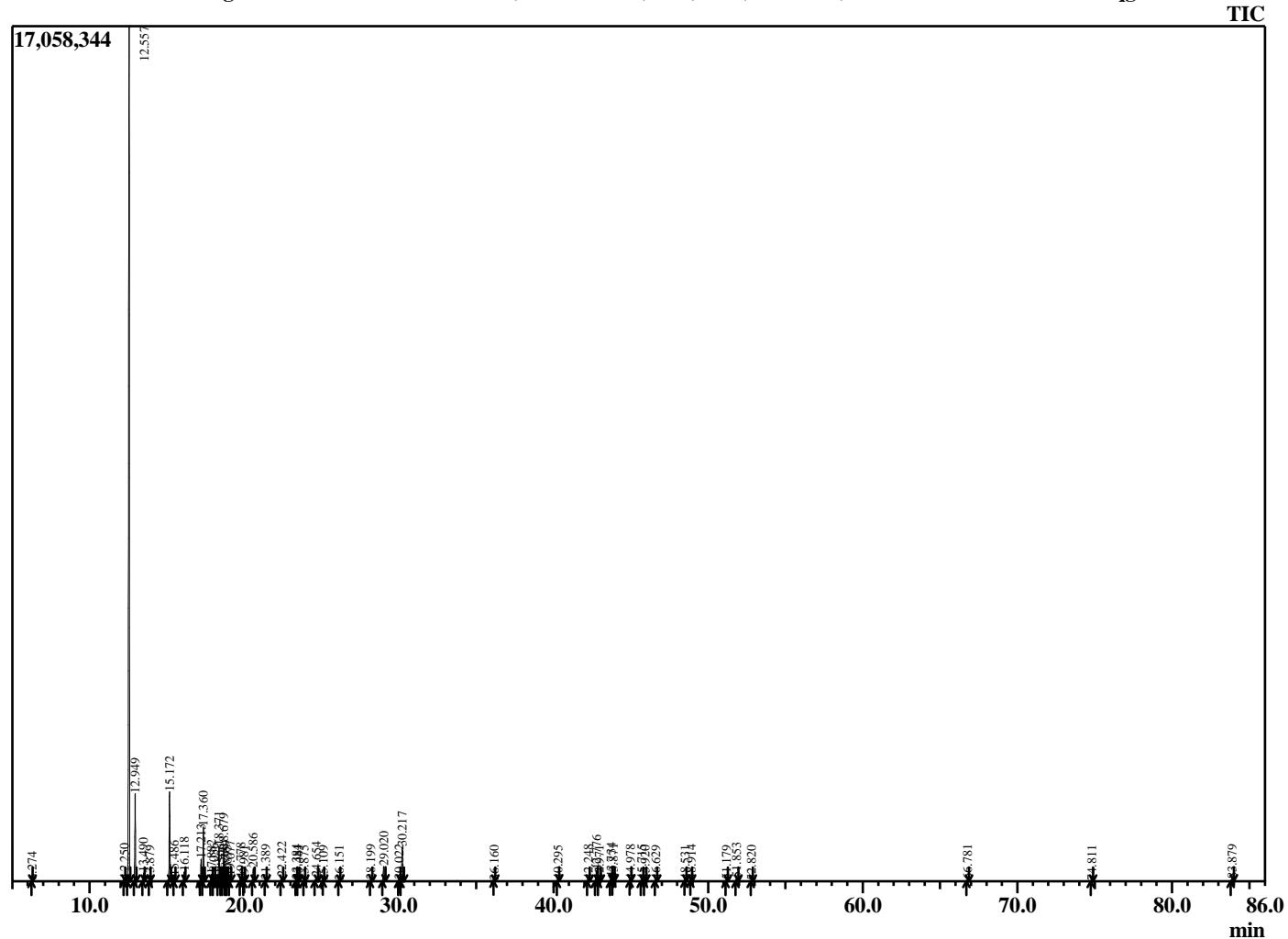
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 8/30/2017 11:27:50 AM
 Sample Type : Essential Oil
 Sample Name : Frankincense - serrata
 Sample ID : 36557
 Injection Volume : 0.10
 Data File : C:\CloudStation\GC2\EOU\Academic\Frankincense - serrata 36557.qgd
 Instrument ID : GC-2



Peak Report TIC

R.Time	Name	Area%
6.274	Toluene	0.01
12.250	Hashishene	0.16
12.557	Thujene <alpha->	65.20
12.949	Pinene <alpha->	5.54
13.490	Thuja-2,4(10)diene	0.52
13.879	Camphene	0.06
15.172	Sabinene	6.14
15.486	Pinene <beta->	0.36
16.118	Myrcene	0.62
17.213	Phellandrene <alpha->	1.56
17.360	3-Carene	3.83
17.882	Terpinene <alpha->	0.47
18.036	Cymene <meta->	0.15
18.371	Cymene <para->	2.60
18.506	Thujenol	0.12
18.679	Limonene	2.40
18.789	Phellandrene <beta->	0.41
18.895	1,8-Cineole	0.03
19.077	Ocimene <Z-beta->	0.39
19.778	Ocimene <E-beta->	0.23
19.981	Thujenol isomer	0.04
20.586	Terpinene <gamma->	0.97
21.389	Sabinene hydrate <trans->	0.10
22.422	Terpinolene	0.30
23.384	Linalool	0.08
23.481	Sabinene hydrate <cis->	0.09
23.875	Thujone <alpha->	0.04
24.654	Thujone <beta->	0.39
25.109	Sabina ketone <dehydro->	0.02
26.151	Sabinol <trans->	0.04
28.199	Sabinol isomer	0.09
29.020	Terpinen-4-ol	1.21
30.022	Terpineol <alpha->	0.08
30.217	Estragole	2.86
36.160	Bornyl acetate	0.02
40.295	Terpinyl acetate <alpha->	0.06
42.248	Copaene <alpha->	0.13
42.776	Bourbonene <beta->	0.96
42.971	Bourbonene <alpha->	0.08
43.734	Methyleugenol	0.24
43.871	Aromadendrene	0.19
44.978	Copaene <beta->	0.06
45.715	Muurola-3,5-diene <trans->	0.10
45.920	Cadina-1(6),4-diene <trans->	0.07
46.629	Germacrene D	0.07
48.531	Murrola-4(14),5-diene<trans->	0.06
48.914	Cadinene <gamma->	0.14
51.179	Cadinene <delta->	0.06
51.853	Unidentified sesquiterpenol	0.30
52.820	Elemicin	0.05
66.781	Phellandrene dimer <alpha->	0.10
74.811	Elemene dimer <beta->	0.04
83.879	Serratol	0.17
		100.00

Chromatogram Frankincense - serrata C:\CloudStation\GC2\EOU\Academic\Frankincense - serrata 36557.qgd



Comments:
 The analysis of this Frankincense batch sample meets the expected chemical profile for authentic essential oil of Boswellia serrata. No contamination or adulteration was detected.