

Sample Information

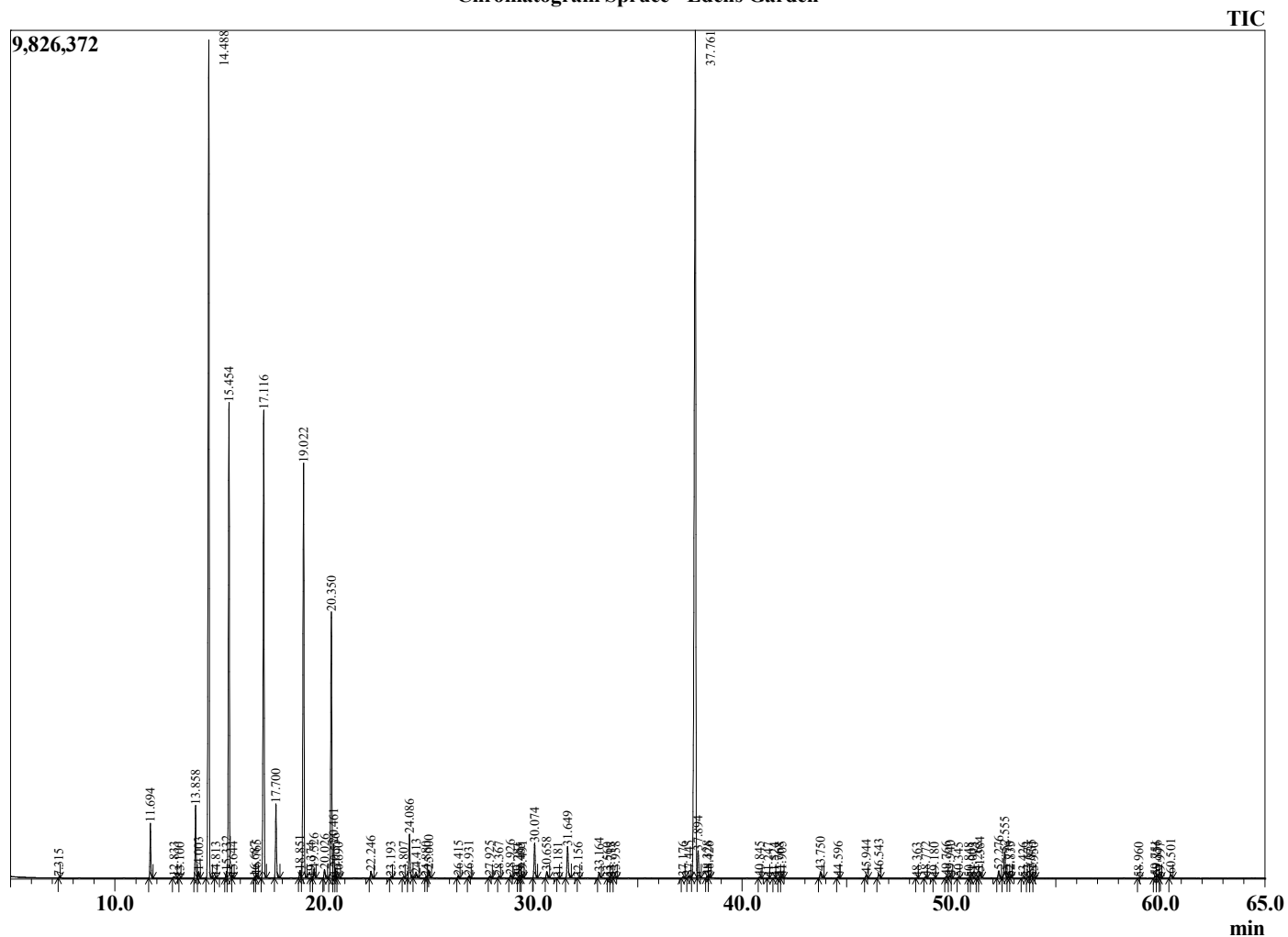
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 7/13/2022 6:39:49 PM
 Sample Type : Essential Oil
 Sample Name : Spruce - Edens Garden
 Sample ID : BC07CX
 Injection Volume : 0.10
 Instrument ID : GC-2



Peak Report TIC

R.Time	Name	Area%
7.315	Toluene	0.01
11.694	Santene	1.07
12.833	Unidentified	0.05
13.100	Unidentified	0.01
13.858	Tricyclene	1.52
14.003	alpha-Thujene	0.14
14.488	alpha-Pinene	19.67
14.813	Unidentified	0.03
15.332	alpha-Fenchene	0.15
15.454	Camphene	10.54
15.644	Thuja-2,4(10)-diene	0.02
16.687	Cymene analogue	0.02
16.765	Sabinene	0.06
17.116	beta-Pinene	10.77
17.700	Myrcene	1.65
18.851	alpha-Phellandrene	0.17
19.022	delta-3-Carene	9.85
19.374	1,4-Cineole	0.00
19.526	alpha-Terpinene	0.22
20.026	para-Cymene	0.22
20.350	Limonene	6.39
20.461	beta-Phellandrene	0.81
20.536	1,8-Cineole	0.20
20.690	cis-beta-Ocimene	0.02
22.246	gamma-Terpinene	0.17
23.193	Pinol	0.03
23.807	Isoterpinolene	0.04
24.086	Terpinolene	1.10
24.413	para-Cymenene	0.12
24.880	alpha-Campholenal analogue	0.02
25.000	Linalool	0.22
26.415	alpha-Fenchol	0.05
26.931	alpha-Campholenal	0.05
27.925	trans-Pinocarveol	0.05
28.367	Camphor	0.05
28.926	Camphene hydrtae	0.08
29.281	trans-Pinocamphone	0.01
29.405	Unidentified	0.01
29.491	Isoborneol	0.05
30.074	Borneol	0.92
30.658	Terpinen-4-ol	0.18
31.181	Unidentified	0.01
31.649	alpha-Terpineol	0.90
32.156	Bornyl formate	0.01
33.164	Fenchyl acetate	0.14
33.560	Unidentified	0.01
33.715	Citronellol	0.02
33.938	Thymol methyl ether	0.03
37.176	Chrysanthenyl acetate	0.04
37.445	Unidentified	0.07
37.761	Bornyl acetate	28.71
37.894	Isobornyl acetate	0.70
38.328	Unidentified	0.05
38.426	trans-Pinocarvyl acetate	0.04
40.845	Unidentified	0.04
41.247	Unidentified	0.01
41.524	Unidentified	0.01
41.768	alpha-Terpinyl acetate	0.02
41.905	Citronellyl acetate	0.04
43.750	Geranyl acetate	0.19
44.596	beta-Elementene	0.04
45.944	Longifolene	0.10

Chromatogram Spruce - Edens Garden



Comments:

The analysis of this Spruce batch sample meets the expected chemical profile for authentic essential oil of Picea mariana.

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.

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R.Time	Name	Area%
46.543	beta-Caryophyllene	0.12
48.363	trans-Muurolo-3,5-diene	0.01
48.772	alpha-Humulene	0.04
49.180	cis-Muurolo-4(14),5-diene	0.01
49.766	trans-Cadina-1(6),4-diene	0.06
49.940	gamma-Muuroloene	0.08
50.345	Germacrene D	0.02
50.848	beta-Selinene	0.01
51.003	gamma-Amorphene	0.02
51.263	Unidentified	0.04
51.384	alpha-Muuroloene	0.16
52.276	gamma-Cadinene	0.21
52.555	delta-Cadinene	0.76
52.770	trans-Calamenene	0.03
52.835	Zonarene	0.02
53.426	trans-Cadina-1,4-diene	0.02
53.673	alpha-Cadinene	0.04
53.835	trans-alpha-Bisabolene	0.09
53.950	alpha-Calacorene	0.02
58.960	Epicubenol	0.01
59.751	epi-alpha-Cadinol	0.07
59.856	epi-alpha-Muurolol	0.07
59.997	alpha-Muurolol	0.02
60.501	Cadin-4-en-10-ol	0.12
		100.00