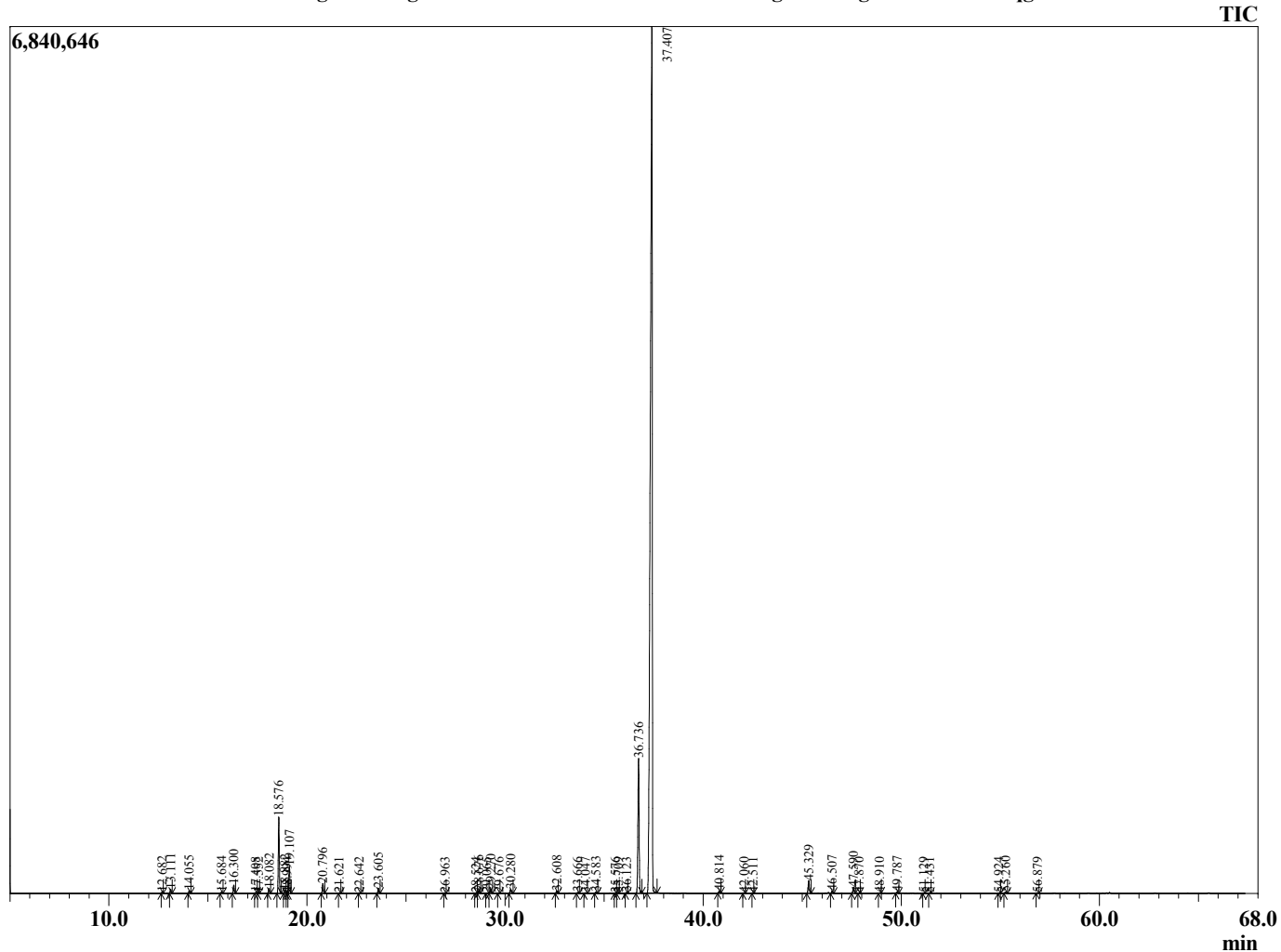


Sample Information

Analyzed by : Dr. Robert S. Pappas
 Analyzed : 10/9/2015 1:08:14 PM
 Sample Type : Essential Oil
 Sample Name : Oregano
 Sample ID : B151008R
 Injection Volume : 0.10
 Data File : C:\GCMSsolution\Data\EOU\Oregano\Oregano B151008R.qgd



Chromatogram Oregano C:\GCMSsolution\Data\EOU\Oregano\Oregano B151008R.qgd



| R.Time | Name | Area% |
|--------|----------------------------------|--------|
| 12.682 | Thujene<alpha-> | 0.06 |
| 13.111 | Pinene<alpha-> | 0.18 |
| 14.055 | Camphene | 0.13 |
| 15.684 | Octen-3-ol+Pinene<beta-> | 0.08 |
| 16.300 | Myrcene | 0.39 |
| 17.408 | Phellandrene<alpha-> | 0.05 |
| 17.552 | Carene<delta-3-> | 0.03 |
| 18.082 | Terpinene <alpha-> | 0.24 |
| 18.576 | Cymene <para-> | 3.74 |
| 18.882 | Limonene | 0.16 |
| 18.994 | Phellandrene <beta-> | 0.05 |
| 19.107 | 1,8-cineole | 1.37 |
| 20.796 | Terpinene<gamma-> | 0.50 |
| 21.621 | Sabinene hydrate<cis-> | 0.02 |
| 22.642 | Terpinolene | 0.02 |
| 23.605 | Linalool | 0.28 |
| 26.963 | Camphor | 0.02 |
| 28.524 | Terpineol delta + Umbellulone | 0.03 |
| 28.676 | Borneol | 0.14 |
| 29.065 | Menthol | 0.02 |
| 29.270 | Terpinen-4-ol | 0.23 |
| 29.676 | p-cymen-8-ol | 0.02 |
| 30.280 | Terpineol <alpha-> | 0.23 |
| 32.608 | Thymol, methyl ether | 0.13 |
| 33.666 | Carvone | 0.05 |
| 34.047 | Carvotanacetone | 0.04 |
| 34.583 | Carvenone | 0.07 |
| 35.576 | Cinnamaldehyde <trans-> | 0.02 |
| 35.709 | Methyl carvone | 0.03 |
| 36.123 | Isothymol | 0.04 |
| 36.736 | Thymol | 8.16 |
| 37.407 | Carvacrol | 81.67 |
| 40.814 | Eugenol | 0.13 |
| 42.060 | Carvacrol<Dehydro> | 0.03 |
| 42.511 | Copaene <alpha-> | 0.01 |
| 45.329 | Caryophyllene <trans-> | 0.80 |
| 46.507 | Aromadendrene | 0.13 |
| 47.590 | Humulene <alpha-> | 0.39 |
| 47.870 | Aromadendrene<allo-> | 0.01 |
| 48.910 | Tert-butyl-4-hydroxyanisole | 0.03 |
| 49.787 | Viridiflorene (Ledene) | 0.09 |
| 51.129 | Eugenol acetate + Cadinene gamma | 0.02 |
| 51.431 | Amorphene<delta-> | 0.03 |
| 54.924 | Spathulenol | 0.02 |
| 55.260 | Caryophyllene oxide | 0.09 |
| 56.879 | Humulene epoxide II | 0.04 |
| | | 100.00 |

Comments:

Typical Ranges of Main Components: