

Sample Information

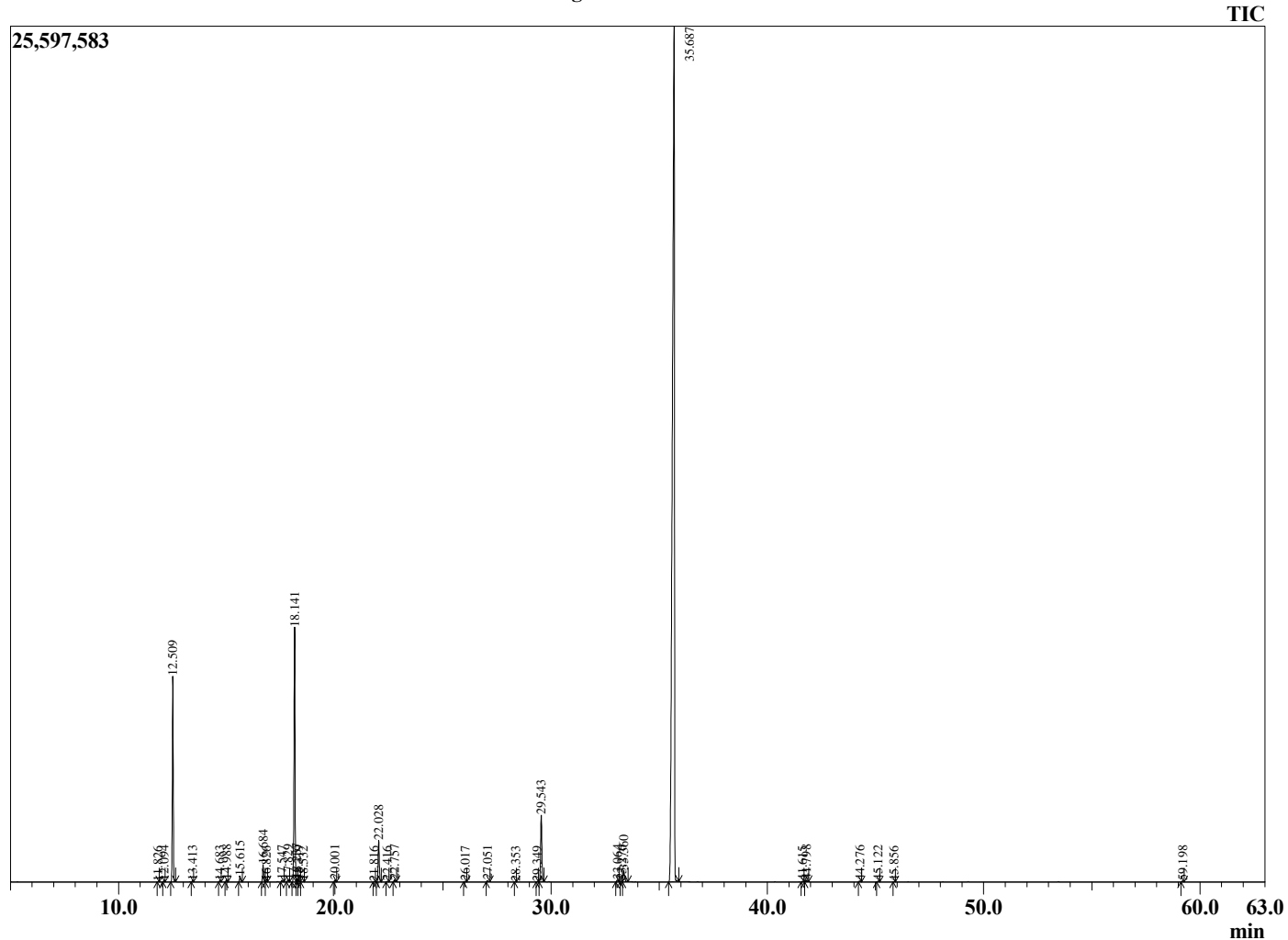
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 12/21/2020 7:44:21 PM
 Sample Type : Essential Oil
 Sample Name : Fennel Oil-Barefut
 Sample ID : 0106
 Injection Volume : 0.10
 Instrument ID: GC-4



Peak Report TIC

| R.Time | Name | Area% |
|--------|--------------------------|--------|
| 11.826 | Hashishene | 0.01 |
| 12.094 | alpha-Thujene | 0.04 |
| 12.509 | alpha-Pinene | 7.73 |
| 13.413 | Camphene | 0.04 |
| 14.683 | Sabinene | 0.04 |
| 14.988 | beta-Pinene | 0.08 |
| 15.615 | Myrcene | 0.23 |
| 16.684 | alpha-Phellandrene | 0.73 |
| 16.826 | delta-3-Carene | 0.02 |
| 17.547 | para-methyl-Anisole | 0.07 |
| 17.829 | para-Cymene | 0.09 |
| 18.141 | Limonene | 11.21 |
| 18.237 | beta-Phellandrene | 0.12 |
| 18.319 | 1,8-Cineole | 0.06 |
| 18.532 | (Z)-beta-Ocimene | 0.02 |
| 20.001 | gamma-Terpinene | 0.08 |
| 21.816 | Terpinolene | 0.01 |
| 22.028 | Fenchone | 1.93 |
| 22.416 | Methyl benzoate | 0.02 |
| 22.757 | Linalool | 0.09 |
| 26.017 | Camphor | 0.03 |
| 27.051 | Benzyl acetate | 0.06 |
| 28.353 | Terpinen-4-ol | 0.01 |
| 29.349 | alpha-Terpineol | 0.01 |
| 29.543 | Estragole | 3.34 |
| 33.064 | Linalyl acetate | 0.10 |
| 33.276 | (Z)-Anethole | 0.04 |
| 33.360 | para-Anisaldehyde | 0.61 |
| 35.687 | (E)-Anethole | 72.93 |
| 41.615 | Geranyl acetate | 0.02 |
| 41.798 | Anisyl methyl ketone | 0.09 |
| 44.276 | trans-beta-Caryophyllene | 0.04 |
| 45.122 | trans-alpha-Bergamotene | 0.03 |
| 45.856 | (E)-Cinnamyl acetate | 0.01 |
| 59.198 | Unidentified | 0.04 |
| | | 100.00 |

Chromatogram Fennel Oil-Barefut



Comments:

The analysis of this Fennel, Sweet batch sample meets the expected chemical profile for authentic essential oil of *Foeniculum vulgare*. 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.