

Sample Information

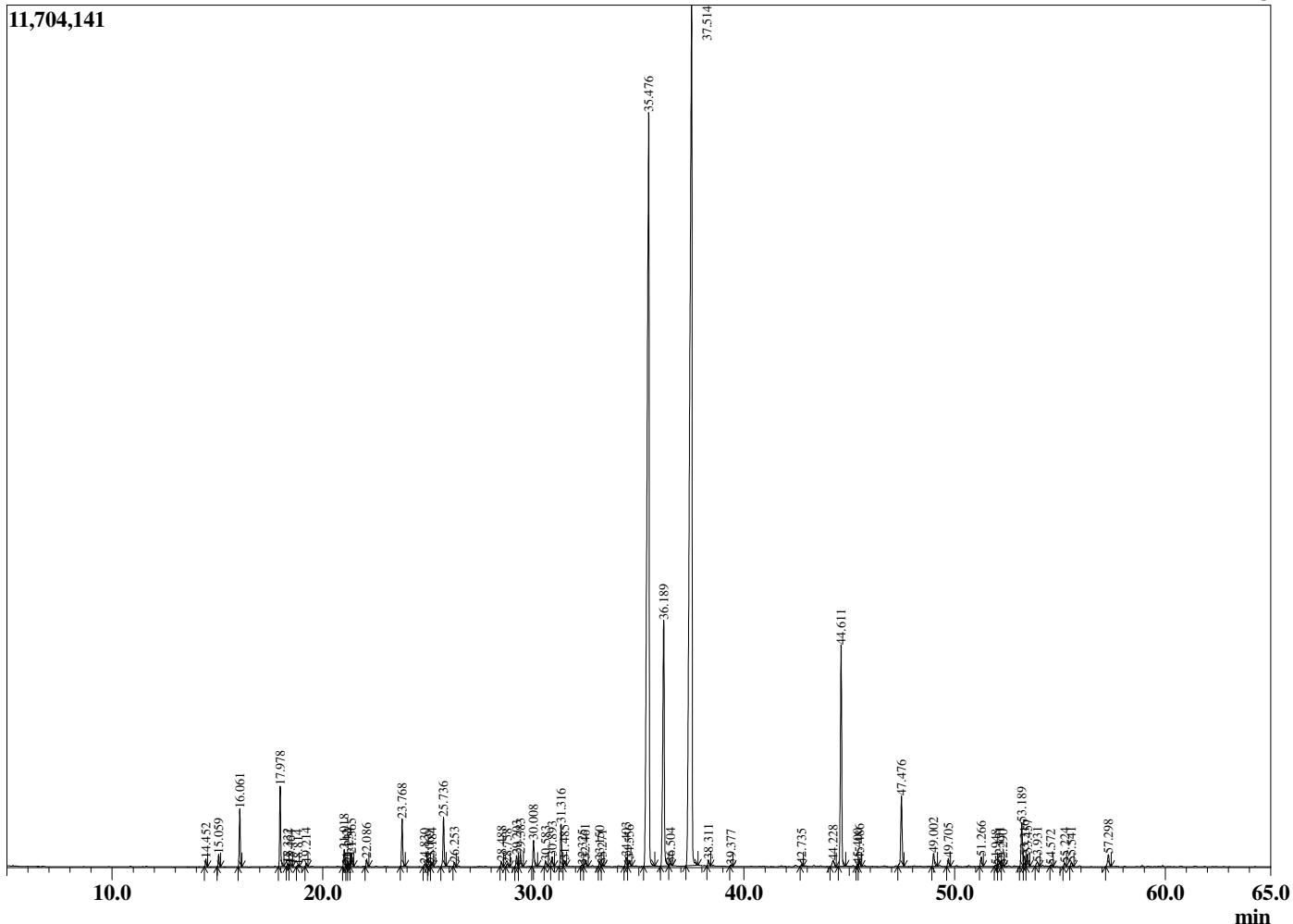
Analyzed by : Dr. Robert S. Pappas
Analyzed : 4/11/2020 7:21:36 AM
Sample Type : Essential Oil
Sample Name : Lemongrass Oil - Barefut
Sample ID : 0106
Injection Volume : 0.10
Instrument ID: : GC-2



Peak Report TIC

| R.Time | Name | Area% |
|--------|-------------------------------|--------|
| 14.452 | Tricyclene | 0.15 |
| 15.059 | alpha-Pinene | 0.24 |
| 16.061 | Camphepane | 1.15 |
| 17.978 | 6-Methyl hept-5-en-2-one | 1.65 |
| 18.332 | Myrcene | 0.06 |
| 18.464 | dehydro-1,8-Cineole | 0.06 |
| 18.814 | trans-Dehydroxylinalool oxide | 0.03 |
| 19.214 | Octanal | 0.06 |
| 21.018 | Limonene | 0.37 |
| 21.142 | beta-Phellandrene | 0.03 |
| 21.234 | 1,8-cineole | 0.07 |
| 21.365 | cis-beta-Ocimene | 0.28 |
| 22.086 | trans-beta-Ocimene | 0.16 |
| 23.768 | 4-Nonanone | 1.05 |
| 24.830 | Terpinolene | 0.07 |
| 25.069 | 4-Nonanol | 0.02 |
| 25.184 | Rosefuran | 0.08 |
| 25.736 | Linalool | 1.15 |
| 26.253 | alpha-Pinene oxide | 0.10 |
| 28.488 | Epiphocitral A | 0.11 |
| 28.758 | exo-Isocitral | 0.09 |
| 29.203 | trans-Chrysanthemal | 0.27 |
| 29.383 | Citronellal | 0.31 |
| 30.008 | Isoneral | 0.64 |
| 30.583 | Isoborneol | 0.13 |
| 30.893 | Borneol | 0.23 |
| 31.316 | Isogeranial | 1.00 |
| 31.485 | Unidentified | 0.14 |
| 32.325 | Unidentified | 0.04 |
| 32.461 | alpha-Terpineol | 0.17 |
| 33.150 | Decanal | 0.13 |
| 33.271 | cis-Carveol | 0.04 |
| 34.403 | Nerol | 0.26 |
| 34.556 | Citronellol | 0.18 |
| 35.476 | Neral | 30.80 |
| 36.189 | Geraniol | 7.45 |
| 36.504 | Piperitone | 0.07 |
| 37.514 | Geranial | 39.41 |
| 38.311 | trans-Carvone oxide | 0.15 |
| 39.377 | Geranyl formate | 0.03 |
| 42.735 | Citronellyl acetate | 0.05 |
| 44.228 | Isoleadene | 0.24 |
| 44.611 | Geranyl acetate | 5.68 |
| 45.400 | beta-Cubebene | 0.04 |
| 45.486 | beta-Elemene | 0.16 |
| 47.476 | beta-Caryophyllene | 1.89 |
| 49.002 | trans-Isoeugenol | 0.37 |
| 49.705 | alpha-Humulene | 0.21 |
| 51.266 | Germacrene D | 0.25 |
| 51.948 | trans-Muurola-4(14),5-diene | 0.04 |
| 52.131 | Unidentified | 0.13 |
| 52.290 | alpha-Muurolene | 0.03 |
| 53.189 | gamma-Cadinene | 1.16 |
| 53.316 | Cubebol | 0.27 |
| 53.457 | delta-Cadinene | 0.30 |
| 53.931 | trans-gamma-Bisabolene | 0.15 |
| 54.572 | alpha-Cadinene | 0.03 |
| 55.224 | Elemol | 0.09 |
| 55.541 | Geranyl butyrate | 0.10 |
| 57.298 | Caryophyllene oxide | 0.37 |
| | | 100.00 |

Chromatogram Lemongrass Oil - Barefut



Comments:

The analysis of this Lemongrass batch sample meets the expected chemical profile for authentic essential oil of *Cymbopogon flexuosus*. 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.