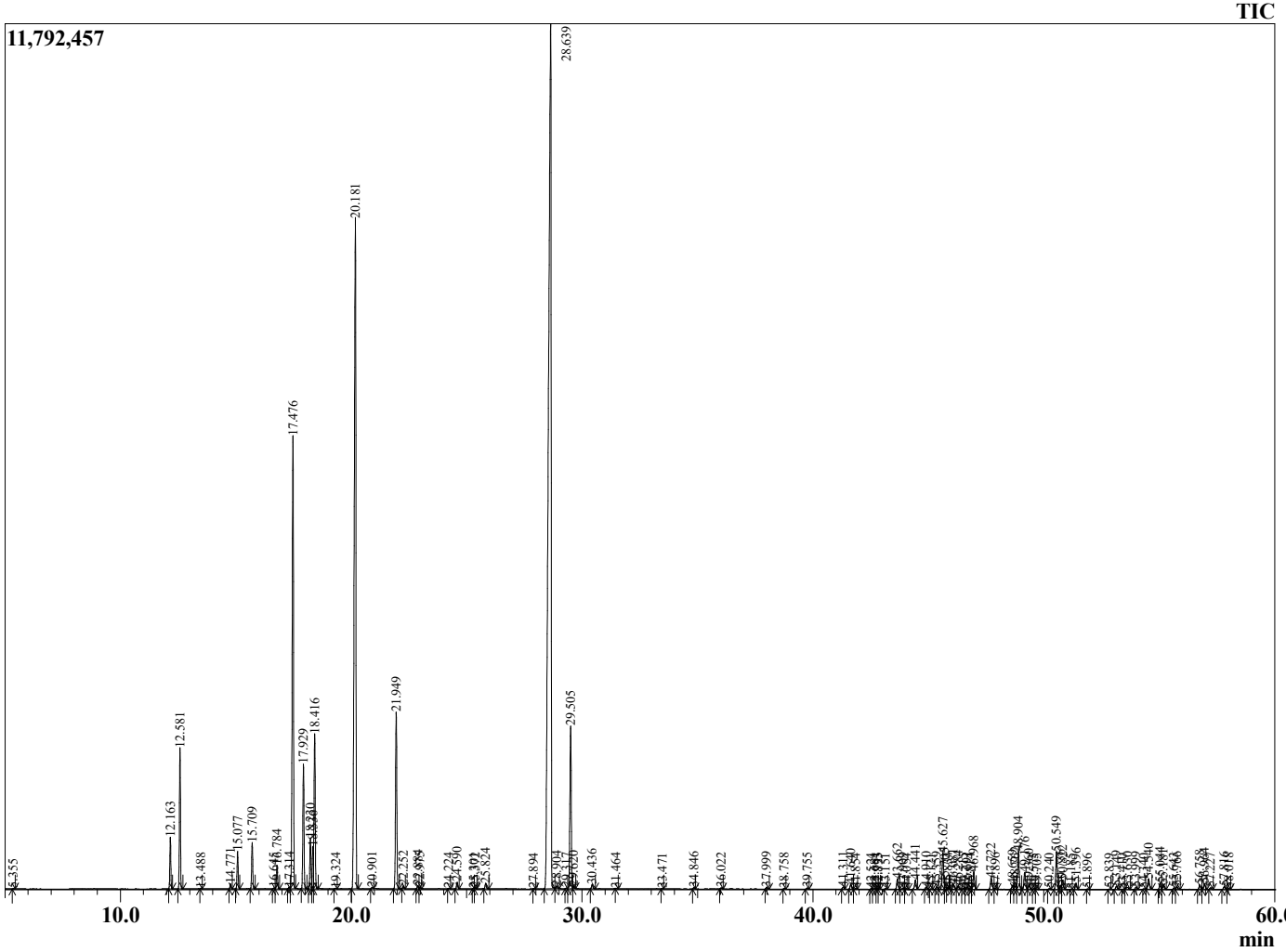
## Sample Information

**Analyzed by** : Dr. Robert S. Pappas
**Analyzed** : 2/4/2023 7:54:45 AM
**Sample Type** : Essential Oil
**Sample Name** : Tea Tree Oil - Revive
**Sample ID** : 3V
**Injection Volume** : 0.10
**Instrument ID:** : GC-3

## Chromatogram Tea Tree Oil - Revive




**Comments:**

The analysis of this Tea Tree batch sample meets the expected chemical profile for authentic essential oil of *Melaleuca alternifolia.* 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.



Peak Report TIC

| R.Time | Name | Area% |
|---|---|---|
| 4.219 | 2-Methylbutanal | 0.02 |
| 5.355 | Isobutyric acid | 0.01 |
| 12.163 | alpha-Thujene | 0.87 |
| 12.581 | alpha-Pinene | 2.51 |
| 13.488 | Camphene | 0.01 |
| 14.771 | Sabinene | 0.09 |
| 15.077 | beta-Pinene | 0.71 |
| 15.709 | Myrcene | 0.88 |
| 16.645 | Unidentified | 0.02 |
| 16.784 | alpha-Phellandrene | 0.47 |
| 17.314 | 1,4-Cineole | 0.03 |
| 17.476 | alpha-Terpinene | 10.13 |
| 17.929 | para-Cymene | 2.52 |
| 18.230 | Limonene | 1.05 |
| 18.336 | beta-Phellandrene | 0.80 |
| 18.416 | 1,8-Cineole | 3.26 |
| 19.324 | trans-beta-Ocimene | 0.01 |
| 20.181 | gamma-Terpinene | 19.17 |
| 20.901 | trans-Sabinene hydrate | 0.03 |
| 21.949 | Terpinolene | 3.95 |
| 22.252 | para-Cymenene | 0.05 |
| 22.884 | Linalool | 0.07 |
| 22.975 | cis-Sabinene hydrate | 0.04 |
| 24.224 | endo-Fenchol | 0.01 |
| 24.590 | cis-para-Menth-2-en-1-ol | 0.15 |
| 25.301 | Unidentified | 0.01 |
| 25.372 | Terpin-3-en-1-ol | 0.02 |
| 25.824 | trans-para-Menth-2-en-1-ol | 0.13 |
| 27.894 | Isoborneol | 0.01 |
| 28.639 | Terpinen-4-ol | 40.38 |
| 28.904 | para-Cymen-8-ol | 0.06 |
| 29.317 | Unidentified | 0.02 |
| 29.505 | alpha-Terpineol | 3.90 |
| 29.620 | cis-Piperitol | 0.05 |
| 30.436 | trans-Piperitol | 0.11 |
| 31.464 | Nerol | 0.01 |
| 33.471 | Piperitone | 0.01 |
| 34.846 | cis-Ascridol glycol | 0.03 |
| 36.022 | trans-Ascridol glycol | 0.03 |
| 37.999 | Unidentified | 0.04 |
| 38.758 | delta-Elemene | 0.02 |
| 39.755 | alpha-Cubebene | 0.03 |
| 41.311 | Isoledene | 0.05 |
| 41.640 | alpha-Copaene | 0.13 |
| 41.854 | Unidentified | 0.02 |
| 42.524 | beta-Elemene | 0.02 |
| 42.681 | Vanillin | 0.02 |
| 42.793 | Unidentified | 0.03 |
| 42.835 | Unidentified | 0.01 |
| 43.151 | Methyleugenol | 0.02 |
| 43.662 | alpha-Gurjunene | 0.28 |
| 43.909 | Gurjunene isomer | 0.04 |
| 44.054 | Unidentified | 0.02 |
| 44.441 | beta-Caryophyllene | 0.26 |
| 44.910 | gamma-Maaliene | 0.06 |
| 45.121 | Calarene | 0.01 |
| 45.359 | alpha-Maaliene | 0.07 |
| 45.627 | beta-Copaene | 0.99 |
| 45.705 | Unidentified | 0.16 |
| 45.834 | Unidentified | 0.02 |
| 46.081 | alpha-Guaiene | 0.15 |
| 46.284 | trans-Murrola-3,5-diene | 0.09 |

| R.Time | Name | Area% |
|---|---|---|
| 46.515 | Valerna-4,7(11)-diene | 0.03 |
| 46.691 | alpha-Humulene | 0.07 |
| 46.814 | Unidentified | 0.01 |
| 46.968 | Alloaromodendrene | 0.46 |
| 47.722 | cis-Murrola-4(14),5-diene | 0.32 |
| 47.896 | gamma-Muurolene | 0.03 |
| 48.659 | delta-Selinene | 0.12 |
| 48.762 | beta-Selinene | 0.20 |
| 48.904 | Viridiflorene | 0.99 |
| 49.176 | Bicyclogermacrene | 0.50 |
| 49.360 | alpha-Muurolene | 0.13 |
| 49.575 | Unidentified | 0.02 |
| 49.705 | Unidentified | 0.02 |
| 50.240 | gamma-Cadinene | 0.02 |
| 50.549 | delta-Cadinene | 0.98 |
| 50.736 | cis-Calamenene | 0.10 |
| 50.822 | Zonarene | 0.24 |
| 51.185 | Unidentified | 0.01 |
| 51.396 | trans-Cadina-1,4-diene | 0.16 |
| 51.896 | alpha-Calacorene | 0.01 |
| 52.839 | Unidentified | 0.01 |
| 53.149 | Unidentified | 0.09 |
| 53.410 | Unidentified | 0.01 |
| 53.630 | Palustrol | 0.08 |
| 53.999 | Spathulenol | 0.06 |
| 54.340 | Unidentified | 0.01 |
| 54.540 | Viridiflorol | 0.31 |
| 55.044 | Globulol | 0.18 |
| 55.181 | Guaiol | 0.13 |
| 55.643 | Ledol | 0.04 |
| 55.766 | Rosifoliol | 0.07 |
| 56.758 | Unidentified | 0.12 |
| 56.964 | 1-epi-Cubenol | 0.16 |
| 57.227 | Unidentified | 0.05 |
| 57.816 | Unidentified | 0.09 |
| 58.018 | alpha-Muurolene | 0.03 |
| | | 100.00 |