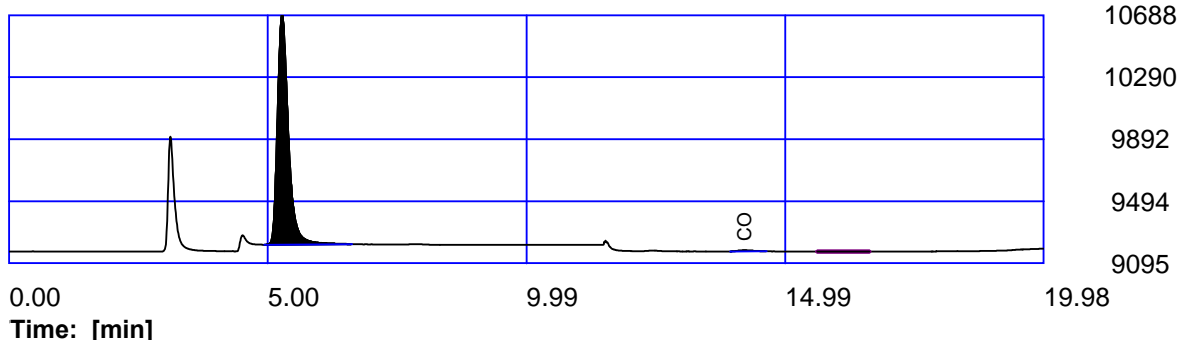


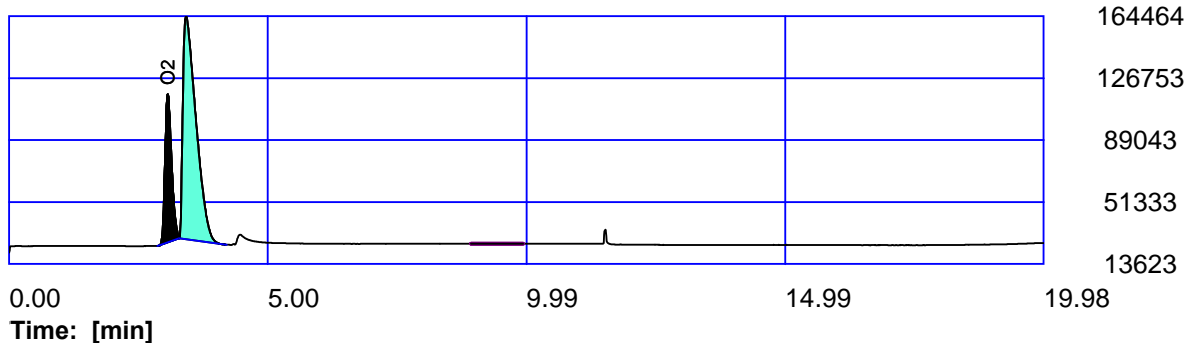
CHROMATOGRAPHIC ANALYSIS OF GASES DISSOLVED IN OIL

Transformer data: 037
Instrument data: TOGA GC, full vacuum degassing, Energy Support
Test method: HRN EN 60567, IEC 60599, IEC 61181
Note: before all tests

FID channel: [μV]



TCD channel: [μV]



| Component | | Ref. value μl/l (ppm) | Meas. value μl/l (ppm) | Nom. value μl/l (ppm) | Exceed. nom. val. % |
|-----------------|-------------------------------|--------------------------|---------------------------|--------------------------|------------------------|
| Hydrogen | H ₂ | - | - | 15.0 | - |
| Methane | CH ₄ | - | - | 5.0 | - |
| Ethine | C ₂ H ₂ | - | - | 1.0 | - |
| Ethene | C ₂ H ₄ | - | - | 2.0 | - |
| Ethane | C ₂ H ₆ | - | - | 5.0 | - |
| Carbon monoxide | CO | - | 0.43 | 80.0 | - |
| Carbon dioxide | CO ₂ | - | 33.7 | 200 | - |
| Nitrogen | N ₂ | - | 6756 | - | - |
| Oxygen | O ₂ | - | 1580 | - | - |
| Total gas | TG | - | 8370 | - | - |

INTERPRETATION OF TEST RESULTS: All gas concentrations are low and according with typical manufacturer's gas values acc. QA-RU-15-00-06

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