

**Reference**

CEPSA Code: 19 102  
 Description: GE Jenbacher unit number: 481  
 Product: CEPSA TRONCOIL GAS JGC 40  
 Plant: Netom

**Sample Data**

|               | Current    | Previous   | Previous   |
|---------------|------------|------------|------------|
| Label         | 61030      | 22438      | 22438      |
| Sample name   | 19111      | 19081      | 19069      |
| Sampled Date  | 27/ 5/2019 | 22/ 4/2019 | 11/ 3/2019 |
| Date Received | 4/ 6/2019  | 7/ 5/2019  | 29/ 3/2019 |
| Equip. Hrs/Km | 84308      | 83452      |            |
| Oil Hrs/Km    | 2261       | 1405       | 783        |
| Replacement   |            | No         | No         |
| Filler        |            |            |            |
| Oil Reference | 5364       | 5364       | 5364       |
| Sample Point  |            |            |            |

**Results**

| - Physico-Chemical Properties   |              |         |           |        |
|---------------------------------|--------------|---------|-----------|--------|
| Water - %(m/m)                  | Karl Fischer | <0.010  | <0.010    | <0.010 |
| Viscosity 100° C - cSt          | ASTM D 445   | 16.12   | 15.98     | 15.68  |
| Viscosity 40° C - cSt           | ASTM D 445   | 165.4 * | 161.605 * | 156.1  |
| Base Number - mg KOH/g          | ASTM D2896   | 3.9     | 4.1       | 4.2    |
| Acid Number - mg KOH/g          | ASTM D 664   | 2.49    | 2.58      | 2.30   |
| Oxidation (Abs/cm at 1720 cm-1) | Infrarrojo   | 15.9    | 15.3      | 10.5   |
| Nitration (Abs/cm at 1630 cm-1) | Infrarrojo   | 11.0    | 8.1       | 7.1    |
| Soot (Abs/cm at 1980 cm-1)      | Infrarrojo   | 1.52    | <0.01     | <0.01  |
| - Additive Elements             |              |         |           |        |
| B (Boron) - ppm WT              | ICP          | 79      | 80        | 80     |
| Ba (Barium) - ppm WT            | ICP          | <1      | <1        | <1     |
| Ca (Calcium) - ppm WT           | ICP          | 1712    | 1290      | 1364   |
| Mg (Magnesium) - ppm WT         | ICP          | 24      | 45        | 44     |
| Mo (Molybdenum) - ppm WT        | ICP          | <1      | <1        | 1      |
| P (Phosphorus) - ppm WT         | ICP          | 292     | 244       | 251    |
| Zn (Zinc) - ppm WT              | ICP          | 399     | 324       | 321    |
| - Wear and contaminant Elements |              |         |           |        |
| Al (Aluminium) - ppm WT         | ICP          | 2       | 3         | 1      |
| Cu (Copper) - ppm WT            | ICP          | 4       | 3         | 4      |
| Cr (Chromium) - ppm WT          | ICP          | 1       | 2         | <1     |
| Fe (Iron) - ppm WT              | ICP          | 14      | 9         | 9      |
| Pb (Lead) - ppm WT              | ICP          | 1       | 2         | <1     |
| Si (Silicon) - ppm WT           | ICP          | 2       | <1        | 4      |
| Na (Sodium) - ppm WT            | ICP          | 5       | 4         | 5      |
| Sn (Tin) - ppm WT               | ICP          | <1      | <1        | <1     |

- Level **Caution** (\*) Level **Alert** (\*\*)

**Diagnosis**

OIL: SLIGHT VISCOSITY INCREASE AT 40°C DUE TO NORMAL OXIDATION PROCESS  
 REMAINING PROPERTIES WITHIN SUITABLE VALUES  
 EQUIPMENT: WEAR METALS ARE WITHIN CORRECT VALUES

Date: 11/06/2019

**Preventive/Recommended Actions**

THERE IS NOT ANY SIGN OF OXIDATION OR NITRATION IN THE OIL SAMPLE  
 CHECK THE VISCOSITY VARIATION IN NEXT SAMPLES  
 KEEP USING OIL ANALYSIS SAMPLE PROGRAM

