

OIL ANALYSIS REPORT



Machine Id 6 (S/N 302)

Component Compressor Fluid TULCO LUBSOIL LPG WS 150 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

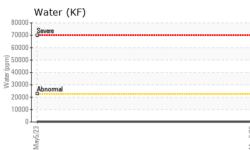
Fluid Condition

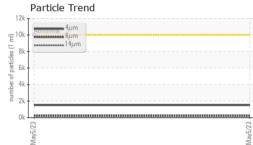
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

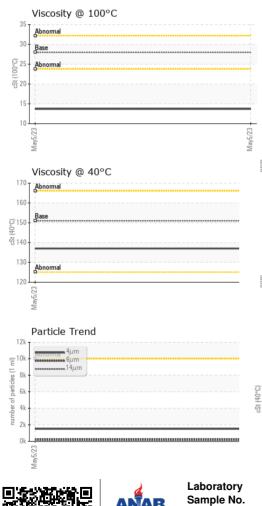
| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|------------------|----------|--------------|------------|-------------|----------|----------|
| Sample Number | | Client Info | | TO60000983 | | |
| Sample Date | | Client Info | | 05 May 2023 | | |
| Machine Age | hrs | Client Info | | 710 | | |
| Oil Age | hrs | Client Info | | 0 | | |
| Oil Changed | | Client Info | | Not Changd | | |
| Sample Status | | | | NORMAL | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >50 | 1 | | |
| Chromium | ppm | ASTM D5185m | >10 | <1 | | |
| Nickel | ppm | ASTM D5185m | | 0 | | |
| Titanium | ppm | ASTM D5185m | | <1 | | |
| Silver | ppm | ASTM D5185m | | <1 | | |
| Aluminum | ppm | ASTM D5185m | >25 | <1 | | |
| Lead | ppm | ASTM D5185m | >25 | 2 | | |
| Copper | ppm | ASTM D5185m | >50 | 0 | | |
| Tin | ppm | ASTM D5185m | >15 | <1 | | |
| Vanadium | ppm | ASTM D5185m | | 0 | | |
| Cadmium | ppm | ASTM D5185m | | 0 | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | 0 | 47 | | |
| Barium | ppm | ASTM D5185m | 0 | 0 | | |
| Molybdenum | ppm | ASTM D5185m | 0 | <1 | | |
| Manganese | ppm | ASTM D5185m | | <1 | | |
| Magnesium | ppm | ASTM D5185m | 0 | 18 | | |
| Calcium | ppm | ASTM D5185m | 0 | 1347 | | |
| Phosphorus | ppm | ASTM D5185m | 0 | 301 | | |
| Zinc | ppm | ASTM D5185m | 0 | 325 | | |
| Sulfur | ppm | ASTM D5185m | 0 | 2346 | | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >25 | 2 | | |
| Sodium | ppm | ASTM D5185m | | 4 | | |
| Potassium | ppm | ASTM D5185m | >20 | 3 | | |
| Water | % | | >2.26 | 0.008 | | |
| ppm Water | ppm | ASTM D6304 | >22600 | 83.1 | | |
| FLUID CLEANLIN | ESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | >10000 | 1505 | | |
| Particles >6µm | | ASTM D7647 | >1300 | 229 | | |
| Particles >14µm | | ASTM D7647 | >320 | 13 | | |
| Particles >21µm | | ASTM D7647 | >80 | 2 | | |
| Particles >38µm | | ASTM D7647 | >20 | 1 | | |
| Particles >71µm | | ASTM D7647 | >4 | 0 | | |
| Oil Cleanliness | | ISO 4406 (c) | >20/17/15 | 18/15/11 | | |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.25 | | |



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| | VISUAL | | method | limit/base | current | history1 | history2 |
|---|--|--|--|--|--|--------------------|---|
| | White Metal | scalar | *Visual | NONE | NONE | | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | | |
| | Precipitate | scalar | *Visual | NONE | NONE | | |
| | Silt | scalar | *Visual | NONE | NONE | | |
| | Debris | scalar | *Visual | NONE | NONE | | |
| | Sand/Dirt | scalar | *Visual | NONE | NONE | | |
| Mar5.03. | | scalar | *Visual | NORML | NORML | | |
| New York | Odor | scalar | *Visual | NORML | NORML | | |
| | Emulsified Water | scalar | *Visual | >2.26 | NEG | | |
| | Free Water | scalar | *Visual | | NEG | | |
| | FLUID PROPER | TIES | method | limit/base | current | history1 | history2 |
| | Visc @ 40°C | cSt | ASTM D445 | 151 | 137 | | |
| | Visc @ 100°C | cSt | ASTM D445 | 28 | 13.7 | | |
| | Viscosity Index (VI) | Scale | ASTM D2270 | 224 | 95 | | |
| | | S | method | limit/base | current | history1 | history2 |
| C C Sherry | Color | | | | | no image | no image |
| | Bottom | | | | | no image | no image |
| | GRAPHS | | | | | | |
| Marc5.03 | Ferrous Alloys | | | 491,52 | Particle Count | | т26 |
| Mary | 8 - iron | | | 122,88 | 0. Severe | | +24 |
| | E 6 | | | | 1. | | |
| | 2- | | | 30,72 | 0 - Abnormal | | -2 |
| | | | | ₩ = 7,68 | 0 | | -2 |
| | May5/23 | | | May5/23 (per 1 ml) | 0. | | -11 |
| | | | | (C) | | | |
| | Non-ferrous Meta | ls | | oitued 48 | | - | |
| | 8 copper | | | 12 13 | - | | -1 |
| | | | | unu 3 | •- | | |
| | 2 | | | | 8- | | -1 |
| | ۵L ی | | | (/23 | 2- | | -8 |
| | May5/2. | | | May5/23 | 0 | | |
| | Viscosity @ 40°C | | | | ^{4μ} ^{6μ} Acid Number | 14μ 21μ | 38µ 71µ́ |
| | 170 Abnormal | | | (⁰ / ₁ 0.3 NH 0.2 | | | |
| | | | | En1 | 8 | | |
| | (), 0 150 - Base 5 140 | | | | 2 | | |
| | 130 - Abnormal | | | 0.0 Amper 0.0 Numper 0.0 Visit | 6 | | |
| | 120 | | | 0.0 V | 10 | | |
| | May5/23 | | | May5/23 | May5/23 | | |
| Laboratory Sample No. Lab Number Unique Number Test Package | : 05859256 r : 10493721 e : IND 2 (Additional T | Recieved Diagnos Diagnost ests: KF, | d : 30 l ed : 01 d tician : Jon KV100, Prt0 | May 2023 Jun 2023 athan Heste Count, VI) | r | Contact: HE | IPIONS DRIN MIDLAND, 1 US 7970 RMAN GAR2 |
| discuss this sample report | | | | | herm | an_garza@eog ۰۰ | |
| Denotes test methods that tements of conformity to spe | | | | | (ICGM 106-2012) | | (432)686-36 |

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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