

TRI-CON INDUSTRIES, MANUFACTURING Machine Id IMM-002 Milicron 450 ton (S/N H50A0100016)

Component Hydraulic System Fluid MOBIL DTE 25 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

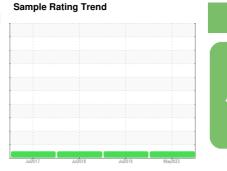
All component wear rates are normal.

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.





NORMAL

| Judo17 Judo18 Judo19 Magdo23 | | | | | | | | | | | | |
|------------------------------|--------|--------------|------------|-------------|-------------|-------------|--|--|--|--|--|--|
| SAMPLE INFORM | 1ATION | method | limit/base | current | history1 | history2 | | | | | | |
| Sample Number | | Client Info | | SBP0004077 | SBP96440044 | SBP90476026 | | | | | | |
| Sample Date | | Client Info | | 09 May 2023 | 15 Jul 2019 | 02 Jul 2018 | | | | | | |
| Machine Age | hrs | Client Info | | 0 | 0 | 0 | | | | | | |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 | | | | | | |
| Oil Changed | | Client Info | | Not Changd | N/A | N/A | | | | | | |
| Sample Status | | | | NORMAL | NORMAL | NORMAL | | | | | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 | | | | | | |
| PQ | | ASTM D8184 | | 15 | | | | | | | | |
| Iron | ppm | ASTM D5185m | >20 | 24 | 35 | 15 | | | | | | |
| Chromium | ppm | ASTM D5185m | >20 | 1 | 1 | 1 | | | | | | |
| Nickel | ppm | ASTM D5185m | >20 | 0 | 0 | 0 | | | | | | |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 | | | | | | |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 | | | | | | |
| Aluminum | ppm | ASTM D5185m | >20 | <1 | 0 | 0 | | | | | | |
| Lead | ppm | ASTM D5185m | >20 | 0 | 0 | 1 | | | | | | |
| Copper | ppm | ASTM D5185m | >20 | 24 | 36 | 32 | | | | | | |
| Tin | ppm | ASTM D5185m | >20 | 0 | 0 | 0 | | | | | | |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 | | | | | | |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 | | | | | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 | | | | | | |
| Boron | ppm | ASTM D5185m | | 0 | 0 | 0 | | | | | | |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 | | | | | | |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | 0 | | | | | | |
| Manganese | ppm | ASTM D5185m | | 1 | 0 | 0 | | | | | | |
| Magnesium | ppm | ASTM D5185m | | 0 | 1 | 1 | | | | | | |
| Calcium | ppm | ASTM D5185m | | 82 | 100 | 109 | | | | | | |
| Phosphorus | ppm | ASTM D5185m | | 443 | 530 | 535 | | | | | | |
| Zinc | ppm | ASTM D5185m | | 635 | 715 | 735 | | | | | | |
| Sulfur | ppm | ASTM D5185m | | 4038 | | | | | | | | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 | | | | | | |
| Silicon | ppm | ASTM D5185m | >15 | 2 | 3 | 3 | | | | | | |
| Sodium | ppm | ASTM D5185m | | 3 | 2 | 2 | | | | | | |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 0 | 0 | | | | | | |
| Chlorine | ppm | ASTM D5185m | | | 0 | 0 | | | | | | |
| Water | % | ASTM D6304 | >0.05 | 0.012 | 0 | 0 | | | | | | |
| ppm Water | ppm | ASTM D6304 | >500 | 128.8 | | | | | | | | |
| FLUID CLEANLIN | ESS | method | limit/base | current | history1 | history2 | | | | | | |
| Particles >4µm | | ASTM D7647 | >5000 | 418 | | | | | | | | |
| Particles >6µm | | ASTM D7647 | >1300 | 105 | | | | | | | | |
| Particles >14µm | | ASTM D7647 | >160 | 14 | | | | | | | | |
| Particles >21µm | | ASTM D7647 | >40 | 3 | | | | | | | | |
| Particles >38µm | | ASTM D7647 | >10 | 0 | | | | | | | | |
| Particles >71µm | | ASTM D7647 | >3 | 0 | | | | | | | | |
| | | 100 4400 4 3 | 1011-111 | | | | | | | | | |

ISO 4406 (c) >19/17/14

16/14/11

Oil Cleanliness



OIL ANALYSIS REPORT

| Water | | | FLUID DEGRAD | ATION | method | limit/base | current | history1 | history2 |
|------------------|-----------|--------------------|--|----------------------------------|---|--|-----------------------|---|--------------------------|
| Severe | | | Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.70 | | |
| 5 - | | | VISUAL | | method | limit/base | current | history1 | history2 |
| | | | White Metal | scalar | *Visual | NONE | NONE | | |
| 2 | | | Yellow Metal | scalar | *Visual | NONE | NONE | | |
| Abnormal | | | Precipitate | scalar | *Visual | NONE | NONE | | |
| Jul6/17 | . 01/210. | May9/23 - | Silt | scalar | *Visual | NONE | NONE | | |
| | | Ma | Debris | scalar | *Visual | NONE | NONE | | |
| PQ | | | Sand/Dirt | scalar | *Visual | NONE | NONE | | |
| T | | | Appearance Odor | scalar scalar | *Visual *Visual | NORML | NORML | | |
|) - Gevere | | | Emulsified Water | scalar | *Visual | >0.05 | NEG | | |
|) <mark>-</mark> | | | Free Water | scalar | *Visual | | NEG | | |
|) - dbnormal | | | FLUID PROPER | TIES | method | limit/base | current | history1 | history2 |
| | | | Visc @ 40°C | cSt | ASTM D445 | 44.2 | 44.9 | 44.5 | 45 |
| - 52/6/9M | | Ma/9/23 - | SAMPLE IMAGE | S | method | limit/base | current | history1 | history2 |
| Particle Trend | | M | Color | | | | | no image | no image |
| 14µm | | | Bottom | | | | | no image | no image |
| | | | GRAPHS | | | | | | |
| Jul6/17 | 01/210r | May9/23 | Ferrous Alloys | | | 491,520 | Particle Count | | т26 |
| | | , <u> </u> | 30 - iron chromium | | | 122,880 | | | -24 |
| Viscosity @ 40° | C | | a 20- nickel | | | | Severe | | -22 |
| Abnormal | | | | | | 30,720 | | | |
| | | | Jul6/17 | | Jul15/19 - | (per 1 ml) 1,680 (ber 1 ml) | Abnormal | | +20 |
| Base | | | Ju Ju | | Jul | May9/23 1 m] 1 m] 1 m] 1 m] | | | -20 -18 -16 -14 |
| | | | Non-ferrous Meta | ls | | otted 480 | | | -16 |
| Abnormal | | | 30 copper | | | b 120 | | | |
| Jul6/17 - | | | 톱 20 - tin | | | 30 | | | -12 |
| 51/0lul | Jui2/10 | | 10- | | | 8 | - | | -10 |
| PQ | | | Jul6/1770 | | 61/9 | 2 23 | _ | | -8 |
| | | | Jul Juli | | Jul15/19 | May9/23 | | | 6 |
| Severe | | | Viscosity @ 40°C | | | 2 | ہ 6µ 1 Acid Number | 4μ 21μ | 38µ 71µ |
| | | | Abnormal | | | (^D 0.80 0.60 Built (0.40 | I | | |
| Abnormal | | | 50 − Abnormal ± 45 − Base 3 40 _ Abnormal | | | B 0.60 | | | |
| | | 10 | Abnormal | | | 1 a 0.40 | 1 | | |
| | | | 35 | | | | | | |
| May9/23 + | | | Jul6/17 Jul2/18 | | Jul15/19 | May9/23 A | Jul6/17 | Jul15/19. | |
| | | s sample report, c | : WearCheck USA - : SBP0004077 : 05857243 : 10486598 : PLANT contact Customer Serv re outside of the ISO 3 | Received Diagnose Diagnost | son Ave., Ca I : 25 ed : 31 ician : Jon 00-237-1365 | ry, NC 27513 May 2023 May 2023 athan Hester 9. | | DUSTRIES MANUF/ 4000 N Co pat.ha | |