

OIL ANALYSIS REPORT

Sample Rating Trend

Machine Id OSO1 Component Main Hydraulic System Fluid AW HYDRAULIC OIL ISO 46 (--- LTR)

DIAGNOSIS

Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. We recommend you service the filters on this component. Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) AW HYDRAULIC OIL ISO 46. Please confirm.

NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

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

| | | | Feb2023 | Mar2024 | | |
|--|--------|--------------------------|------------|---------------|-------------|----------|
| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | WC0914602 | WC0779625 | |
| Sample Date | | Client Info | | 11 Mar 2024 | 20 Feb 2023 | |
| Machine Age | hrs | Client Info | | 0 | 0 | |
| Dil Age | hrs | Client Info | | 0 | 0 | |
| Oil Changed | | Client Info | | N/A | N/A | |
| Sample Status | | | | ATTENTION | ATTENTION | |
| CONTAMINATION | J | method | limit/base | current | history1 | history2 |
| Water | | WC Method | >0.05 | NEG | NEG | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| ron | ppm | ASTM D5185(m) | >20 | <1 | 4 | |
| Chromium | ppm | ASTM D5185(m) | >20 | 0 | 0 | |
| Nickel | ppm | ASTM D5185(m) | >20 | <1 | <1 | |
| Fitanium | ppm | ASTM D5185(m) | | 0 | 0 | |
| Silver | ppm | ASTM D5185(m) | | 0 | 0 | |
| Aluminum | ppm | ASTM D5185(m) | >20 | <1 | 0 | |
| _ead | ppm | ASTM D5185(m) | >20 | <1 | 0 | |
| Copper | ppm | ASTM D5185(m) | >20 | <1 | <1 | |
| Tin | ppm | ASTM D5185(m) | >20 | 0 | 0 | |
| Antimony | ppm | ASTM D5185(m) | | 0 | 0 | |
| √anadium | ppm | ASTM D5185(m) | | 0 | 0 | |
| Beryllium | ppm | ASTM D5185(m) | | 0 | 0 | |
| Cadmium | ppm | ASTM D5185(m) | | 0 | 0 | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185(m) | 5 | 0 | <1 | |
| Barium | ppm | ASTM D5185(m) | 5 | 10 | 13 | |
| Volybdenum | ppm | ASTM D5185(m) | 5 | 0 | 0 | |
| Vanganese | ppm | ASTM D5185(m) | | 0 | 0 | |
| Vagnesium | ppm | ASTM D5185(m) | 25 | <1 | <1 | |
| Calcium | ppm | ASTM D5185(m) | 200 | 5 | 6 | |
| Phosphorus | ppm | ASTM D5185(m) | 300 | 436 | 497 | |
| Zinc | ppm | ASTM D5185(m) | 370 | 444 | 474 | |
| Sulfur | ppm | ASTM D5185(m) | 2500 | 982 | 1049 | |
| _ithium | ppm | ASTM D5185(m) | 2000 | <1 | <1 | |
| | ppm | | | | | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185(m) | >15 | 0 | 0 | |
| Sodium | ppm | ASTM D5185(m) | | 0 | 0 | |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | 0 | |
| FLUID CLEANLIN | ESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | >5000 | e 7303 | 6428 | |
| Particles >6µm | | ASTM D7647 | >1300 | <u> </u> | 839 | |
| · · · · · · · · · · · · · · · · · · · | | ASTM D7647 | >160 | 140 | 24 | |
| | | | >40 | 36 | 5 | |
| Particles >14µm | | ASTM D7647 | >40 | 00 | 5 | |
| Particles >14μm Particles >21μm | | ASTM D7647 ASTM D7647 | >40 >10 | 2 | 0 | |
| Particles >14μm Particles >21μm Particles >38μm Particles >71μm | | | >10 | | | |

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ISO



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| | | Acid Number (AN) VISUAL White Metal Yellow Metal | mg KOH/g scalar scalar | method Visual* | 0.57 limit/base NONE | 0.47 current NONE | 0.58 history1 NONE | history2 |
|------|---------------------|---|--|--|----------------------------|---|--|--|
| | | White Metal Yellow Metal | | Visual* | | | | |
| | neendeendeendeendee | White Metal Yellow Metal | | Visual* | | | | , |
| | | Yellow Metal | | | | | | |
| | | Draginitata | | Visual* | NONE | NONE | NONE | |
| | | Precipitate | scalar | Visual* | NONE | NONE | NONE | |
| | 1/24 | Silt | scalar | Visual* | NONE | NONE | NONE | |
| | Mar11/24 | Debris | scalar | Visual* | NONE | NONE | NONE | |
| nd | | Sand/Dirt | scalar | Visual* | NONE | NONE | NONE | |
| iu | | Appearance | scalar | Visual* | NORML | NORML | NORML | |
| | | Odor | scalar | Visual* | | | NORML | |
| | | | | | >0.05 | | | |
| | | | | Visual^ | | NEG | NEG | |
| | | FLUID PROPER | TIES | method | limit/base | current | history1 | history2 |
| | | Visc @ 40°C | cSt | ASTM D7279(m) | 46 | 45.2 | 41.2 | |
| | ar11/24 | SAMPLE IMAGE | S | method | limit/base | current | history1 | history2 |
| r | 2 | Color | | | | | | no image |
| | | | | | | | | |
| | | Dettern | | | | | | na imaga |
| | | Bollom | | | | | | no image |
| | | | | | | | | |
| | | | | | | | | |
| | 6 . | | | | 491 520 | Particle Count | | |
| | P.4 | iron | | | | | | |
| 40°C | | E 5- nickel | | | | Severe | | |
| | | | | | 30,720 | | | |
| | | | | | 1,680 | Abnormal | | |
| **** | | Feb 20 | | | Mar11 8 (per 1) | | • | |
| | | Non-ferrous Meta | s | | | | | |
| | | 10 conner 1 | | | | | | |
| | | terrene lead | | | qui | | | |
| | YO LE | 8.5- | | | 30 | Ī | | |
| | μ1. | | | | 8 | İ | | |
| | | 120/23 | | | 2 11/24 | + | | |
| | | | | | | 4μ <u>6μ</u> | 14µ 21µ | 38µ 71µ |
| | | | | | | Acid Number | 4.5 A.5 | , , |
| | | Abnormal | | | KOH KOH | - Abronna | | |
| | | 00 € 45 | | | ພັ 0.50 | Base | | |
| | | 40 - Abnormal | | | Numb | Abnormal | | |
| | | 35 | | | 00.0 gci | L | | |
| | | Feb 20/23 | | | Mar11/24 | Feb 20/23 | | |
| | er 40°C | 40°C | Emulsified Water Free Water Fluid PROPERT Visc @ 40°C SAMPLE IMAGES Color Bottom 40°C 40°C | er 40°C | 40°C | Emulsified Water scalar Visual* >0.05 Free Water scalar Visual* FLUID PROPERTIES method limit/base Visc @ 40°C cSt ASTM D7279(m) 46 SAMPLE IMAGES method limit/base Color Bottom GRAPHS Ferrous Alloys 122.880 Non-ferrous Metals Viscosity @ 40°C Viscosity @ 40°C | Emulsified Water scalar Visual* >0.05 NEG Free Water scalar Visual* NEG Color Color Color Bottom GRAPHS Ferrous Alloys On-ferrous Metals On-ferrous Metals On-ferrous Metals Output of the ferrous Metals | Emulsified Water scalar Visual* >0.05 NEG NEG NEG Free Water scalar Visual* NEG NEG Neg NEG NEG Free Water scalar Visual* NEG NEG Free Water Scalar Visual* NEG NEG Solution NEG NEG Free Water Scalar Visual* NEG NEG Solution NEG NEG Free Water Scalar Visual* NEG NEG Non-ferrous Metals Viscosity @ 40°C Viscosity @ 40°C Viscosity @ 40°C Free Water Scalar Visual* NEG NEG Non-ferrous Metals Viscosity @ 40°C Free Water Scalar Visual* NEG NEG Non-ferrous Metals Free Viscosity @ 40°C Free Water Scalar Visual* NEG NEG Non-ferrous Metals Output for the scalar Visual* NEG NEG Non-ferrous Metals Output for the scalar Visual* Neg |

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