

Machine Id HIAB 3772027 - ABC Component Hydraulic System Fluid AW HYDRAULIC OIL ISO 32 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.



All component wear rates are normal.

CONTAMINATION

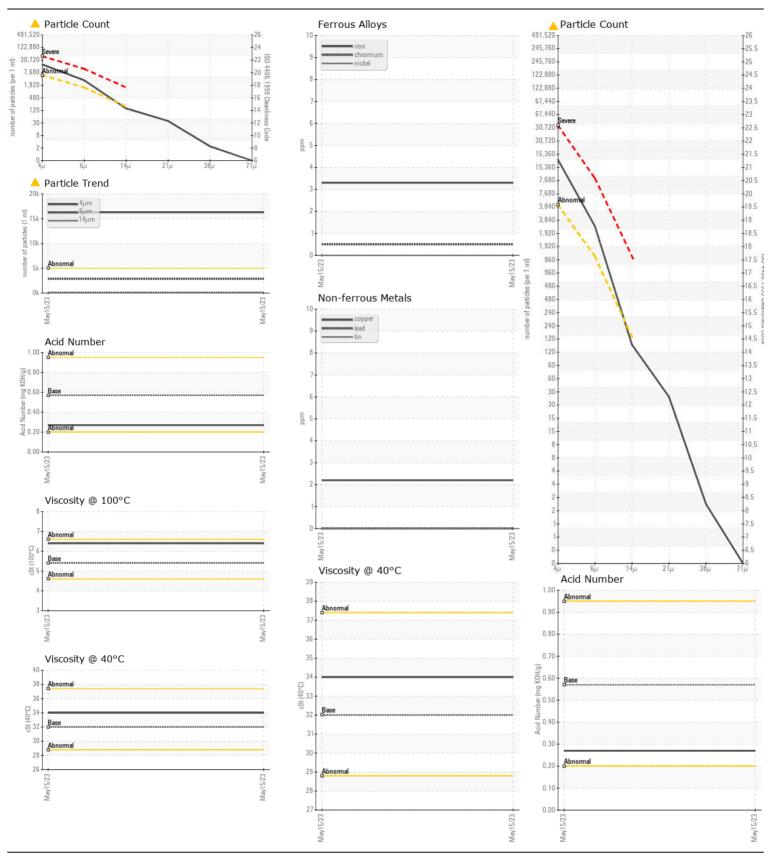
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

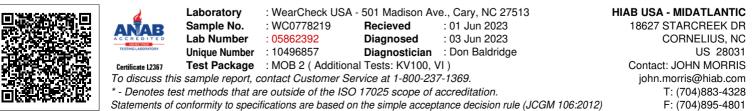
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FLUID CONDITION

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

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------------|------------|--------------|-----------|-------------|----------|----------|
| Sample Number | 00 | Client Info | | WC0778219 | | |
| Sample Date | | Client Info | | 15 May 2023 | | |
| Machine Age | vrs | Client Info | | 0 | | |
| Oil Age | yrs | Client Info | | 0 | | |
| Filter Age | yrs | Client Info | | 1 | | |
| Oil Changed | 9.0 | Client Info | | Not Changd | | |
| Filter Changed | | Client Info | | Changed | | |
| Sample Status | | | | ABNORMAL | | |
| | | | | | | |
| Iron | ppm | ASTM D5185m | >20 | 3 | | |
| Chromium | ppm | ASTM D5185m | >10 | <1 | | |
| Nickel | ppm | ASTM D5185m | >10 | 0 | | |
| Titanium | ppm | ASTM D5185m | | 0 | | |
| Silver | ppm | ASTM D5185m | | 0 | | |
| Aluminum | ppm | ASTM D5185m | >10 | 0 | | |
| Lead | ppm | ASTM D5185m | >10 | 0 | | |
| Copper | ppm | ASTM D5185m | >75 | 2 | | |
| Tin | ppm | ASTM D5185m | >10 | 0 | | |
| Vanadium | ppm | ASTM D5185m | | 0 | | |
| White Metal | scalar | *Visual | NONE | NONE | | |
| Yellow Metal | scalar | *Visual | NONE | NONE | | |
| | | | | | | |
| Silicon | ppm | ASTM D5185m | >20 | <1 | | |
| Potassium | ppm | ASTM D5185m | >20 | <1 | | |
| Water | | WC Method | >0.1 | NEG | | |
| Particles >4µm | | ASTM D7647 | >5000 | <u> </u> | | |
| Particles >6µm | | ASTM D7647 | >1300 | <u> </u> | | |
| Particles >14µm | | ASTM D7647 | >160 | 129 | | |
| Particles >21µm | | ASTM D7647 | >40 | 33 | | |
| Particles >38µm | | ASTM D7647 | >10 | 2 | | |
| Particles >71µm | | ASTM D7647 | >3 | 0 | | |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | <u> </u> | | |
| Silt | scalar | *Visual | NONE | NONE | | |
| Debris | scalar | *Visual | NONE | LIGHT | | |
| Sand/Dirt | scalar | *Visual | NONE | NONE | | |
| Appearance | scalar | *Visual | NORML | NORML | | |
| Odor | scalar | *Visual | NORML | NORML | | |
| Emulsified Water | scalar | *Visual | >0.1 | NEG | | |
| Sodium | nom | ASTM D5185m | | -1 | | |
| Boron | ppm ppm | ASTM D5185m | 5 | <1 0 | | |
| Barium | | ASTM D5185m | 5 | 0 | | |
| Molybdenum | ppm ppm | ASTM D5185m | 5 | <1 | | |
| Manganese | ppm | ASTM D5185m | 0 | <1 | | |
| Magnesium | ppm | ASTM D5185m | 25 | 0 | | |
| Calcium | ppm | ASTM D5185m | 200 | 44 | | |
| Phosphorus | ppm | ASTM D5185m | 300 | 331 | | |
| Zinc | ppm | ASTM D5185m | 370 | 403 | | |
| Sulfur | ppm | ASTM D5185m | 2500 | 5304 | | |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.57 | 0.27 | | |
| Visc @ 40°C | cSt | ASTM D445 | 32 | 34.0 | | |
| Visc @ 100°C | cSt | ASTM D445 | 5.4 | 6.4 | | |
| Viscosity Index (VI) | Scale | ASTM D2270 | 102 | 142 | | |
| | 0.5010 | | | | | |





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