WEAR CONTAMINATION **FLUID CONDITION**

NORMAL ABNORMAL NORMAL

Machine Id **USDA**

Component Hydraulic System

| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|---|------------------|----------|--------------|-----------|------------------|----------|----------|
| | Sample Number | | Client Info | | PH0003245 | | |
| We recommend you service the filters on this component. Resample at the next service interval to monitor. | Sample Date | | Client Info | | 21 Feb 2024 | | |
| | Machine Age | yrs | Client Info | | 4 | | |
| | Oil Age | yrs | Client Info | | 0 | | |
| | Filter Age | yrs | Client Info | | 0 | | |
| | Oil Changed | | Client Info | | Not Changd | | |
| | Filter Changed | | Client Info | | N/A | | |
| | Sample Status | | | | ABNORMAL | | |
| /EAR | Iron | ppm | ASTM D5185m | >20 | 0 | | |
| | Chromium | ppm | ASTM D5185m | >10 | 0 | | |
| All component wear rates are normal. | 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 | >20 | 0 | | |
| | Copper | ppm | ASTM D5185m | >20 | <1 | | |
| | Tin | ppm | ASTM D5185m | >10 | <1 | | |
| | Vanadium | ppm | ASTM D5185m | | <1 | | |
| | White Metal | scalar | *Visual | NONE | NONE | | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | | |
| ONTAMINATION | Silicon | ppm | ASTM D5185m | >15 | 3 | | |
| OTTAIMITATION | Potassium | ppm | ASTM D5185m | | <1 | | |
| There is a high amount of particulates present in the oil. | Water | 1-1- | WC Method | | NEG | | |
| | Particles >4µm | | ASTM D7647 | | 28476 | | |
| | Particles >6µm | | ASTM D7647 | | 10388 | | |
| | Particles >14µm | | ASTM D7647 | >320 | 1234 | | |
| | Particles >21µm | | ASTM D7647 | >80 | 4 367 | | |
| | Particles >38µm | | ASTM D7647 | >20 | 13 | | |
| | Particles >71µm | | ASTM D7647 | >4 | 0 | | |
| | Oil Cleanliness | | ISO 4406 (c) | >20/18/15 | <u> 22/21/17</u> | | |
| | Silt | scalar | *Visual | NONE | NONE | | |
| | Debris | scalar | *Visual | NONE | NONE | | |
| | Sand/Dirt | scalar | *Visual | NONE | NONE | | |
| | Appearance | scalar | *Visual | NORML | NORML | | |
| | Odor | scalar | *Visual | NORML | NORML | | |
| | Emulsified Water | scalar | *Visual | >0.05 | NEG | | |
| LUID CONDITION | Sodium | ppm | ASTM D5185m | | <1 | | |
| | Boron | ppm | ASTM D5185m | | 2 | | |
| The AN level is acceptable for this fluid. The condition of the oil is suitable for further service. | Barium | ppm | ASTM D5185m | | 0 | | |
| | Molybdenum | ppm | ASTM D5185m | | 0 | | |
| | Manganese | ppm | ASTM D5185m | | 0 | | |
| | Magnesium | ppm | ASTM D5185m | | 0 | | |
| | Calcium | ppm | ASTM D5185m | | 2 | | |
| | Phosphorus | ppm | ASTM D5185m | | 220 | | |
| | Zinc | ppm | ASTM D5185m | | 12 | | |
| | Sulfur | ppm | ASTM D5185m | | 81 | | |
| | Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.66 | | |
| | Visc @ 40°C | cSt | ASTM D445 | | 32.8 | | |





Laboratory Sample No.

Lab Number : 06102453

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PH0003245

Unique Number : 10900683

Received **Tested** Diagnosed

: 27 Feb 2024 : 04 Mar 2024

: 04 Mar 2024 - Jonathan Hester

UWMSABD 1933 OBSERVATORY DR MADISON, WI US 53706

Contact: JOHN L.

Test Package: PLANT (Additional Tests: PrtFilter) To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

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

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