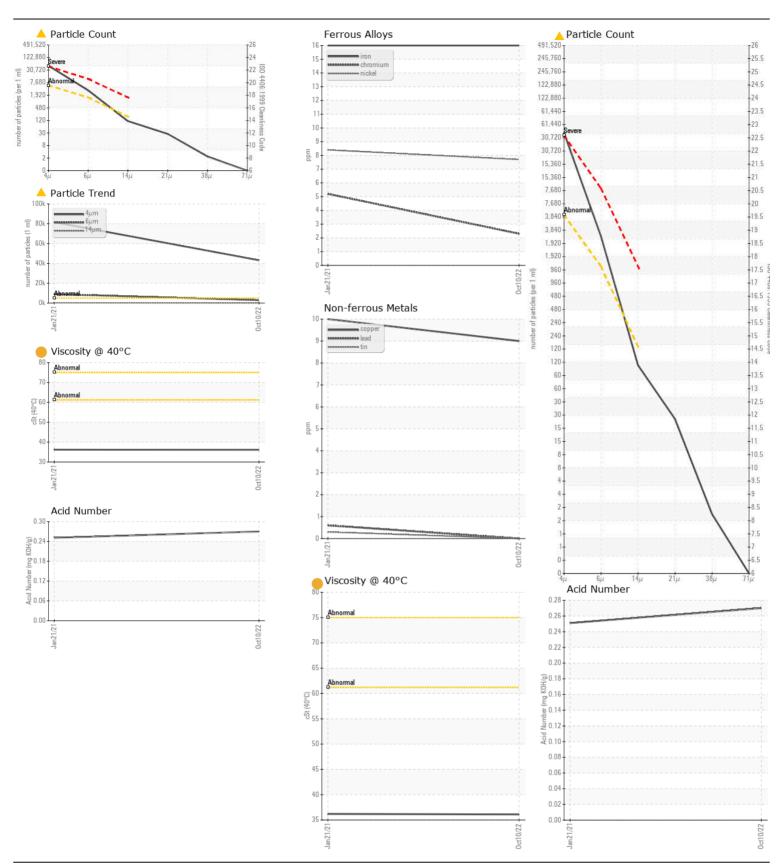
WEAR CONTAMINATION **FLUID CONDITION**

NORMAL **ABNORMAL ATTENTION**

EPF4 Hydraulics

Component Hydraulic System

| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|--|------------------|----------|--------------|------------|-------------------|-------------------|----------|
| | Sample Number | | Client Info | | WC0724324 | WC0491534 | |
| We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. | Sample Date | | Client Info | | 10 Oct 2022 | 21 Jan 2021 | |
| | Machine Age | hrs | Client Info | | 0 | 0 | |
| | Oil Age | hrs | Client Info | | 0 | 0 | |
| | Filter Age | hrs | Client Info | | 0 | 0 | |
| | Oil Changed | | Client Info | | N/A | N/A | |
| | Filter Changed | | Client Info | | N/A | N/A | |
| | Sample Status | | | | ABNORMAL | ABNORMAL | |
| WEAR | Iron | ppm | ASTM D5185m | >20 | 16 | 16 | |
| WEAT | Chromium | ppm | ASTM D5185m | | 2 | 5 | |
| All component wear rates are normal. | Nickel | ppm | ASTM D5185m | | 8 | 8 | |
| | Titanium | ppm | ASTM D5185m | 0 | 0 | 0 | |
| | Silver | ppm | ASTM D5185m | | 0 | <1 | |
| | Aluminum | ppm | ASTM D5185m | >20 | 0 | <1 | |
| | Lead | ppm | ASTM D5185m | >20 | 0 | <1 | |
| | Copper | ppm | ASTM D5185m | | 9 | 10 | |
| | Tin | ppm | ASTM D5185m | >20 | 0 | <1 | |
| | Vanadium | ppm | ASTM D5185m | | 0 | 0 | |
| | White Metal | scalar | *Visual | NONE | NONE | NONE | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | NONE | |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | \15 | <1 | <1 | |
| CONTAININATION | Potassium | ppm | ASTM D5185m | | 10 | 16 | |
| There is a high amount of silt (particulates < 14 microns in size) present in the oil. | Water | % | ASTM D6304 | | NEG | NEG | |
| | Particles >4µm | 70 | ASTM D7647 | | ▲ 43131 | ▲ 81686 | |
| | Particles >6µm | | ASTM D7647 | | <u>^</u> 2851 | <u>▲</u> 9019 | |
| | Particles >14µm | | ASTM D7647 | | 98 | <u>^</u> 295 | |
| | Particles >21µm | | ASTM D7647 | | 24 | △ 69 | |
| | Particles >38µm | | ASTM D7647 | >10 | 2 | 4 | |
| | Particles >71µm | | ASTM D7647 | | 0 | 0 | |
| | Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | <u>^</u> 23/19/14 | 4 24/20/15 | |
| | Silt | scalar | *Visual | NONE | NONE | NONE | |
| | Debris | scalar | *Visual | NONE | NONE | NONE | |
| | Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | |
| | Appearance | scalar | *Visual | NORML | NORML | NORML | |
| | Odor | scalar | *Visual | NORML | NORML | NORML | |
| | Emulsified Water | scalar | *Visual | >0.05 | NEG | NEG | |
| LUID CONDITION | Sodium | ppm | ASTM D5185m | | 27 | 34 | |
| LOID GONDITION | Boron | ppm | ASTM D5185m | | 0 | 2 | |
| The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid. | Barium | ppm | ASTM D5185m | | 0 | 0 | |
| | Molybdenum | ppm | ASTM D5185m | | <1 | <1 | |
| | Manganese | ppm | ASTM D5185m | | <1 | <1 | |
| | Magnesium | ppm | ASTM D5185m | | <1 | 3 | |
| | Calcium | ppm | ASTM D5185m | | 22 | 36 | |
| | Phosphorus | ppm | ASTM D5185m | | 321 | 347 | |
| | Zinc | ppm | ASTM D5185m | | 321 | 370 | |
| | Sulfur | ppm | ASTM D5185m | | 3645 | 3782 | |
| | Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.27 | 0.251 | |
| | Visc @ 40°C | cSt | ASTM D445 | | 36.1 | 36.2 | |





Certificate L2367

Laboratory Sample No.

Lab Number : 05671515 Unique Number: 10181085 Test Package : PLANT

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0724324 Received : 20 Oct 2022 **Tested**

Diagnosed

: 24 Oct 2022 : 24 Oct 2022 - Doug Bogart

US 45895 Contact: Ines Koschalk ikoschalk@amtrim.com T: (419)739-4336 F: (419)739-4374

AMERICAN TRIM 317 KREIN AVE

WAPAKONETA, OH

* - 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)