IND II WEAR CHECK

# OIL ANALYSIS REPORT

| | |
|---|---|
| WEAR | NORMAL |
| CONTAMINATION | NORMAL |
| FLUID CONDITION | NORMAL |

Machine Id
## 170831 EAST DA MA
Component
## Hydraulic System
Fluid
## AW HYDRAULIC OIL ISO 32 (--- GAL)

## 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. 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 32. 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

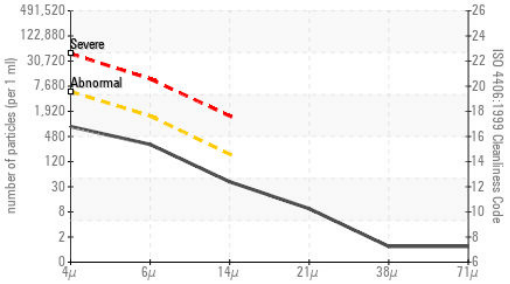
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

## FLUID CONDITION

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

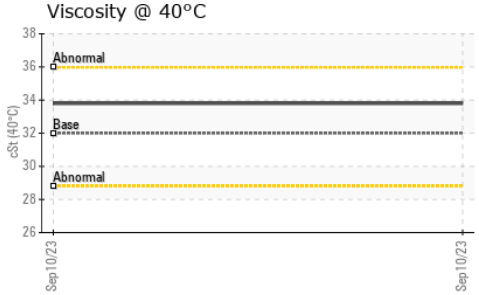
| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | PP | --- | --- |
| Sample Date | | Client Info | | 10 Sep 2023 | --- | --- |
| Machine Age | hrs | Client Info | | 0 | --- | --- |
| Oil Age | hrs | Client Info | | 0 | --- | --- |
| Filter Age | hrs | Client Info | | 0 | --- | --- |
| Oil Changed | | Client Info | | N/A | --- | --- |
| Filter Changed | | Client Info | | N/A | --- | --- |
| Sample Status | | | | NORMAL | --- | --- |
| Iron | ppm | ASTM D5185(m) | >20 | 4 | --- | --- |
| Chromium | ppm | ASTM D5185(m) | >10 | 0 | --- | --- |
| Nickel | ppm | ASTM D5185(m) | >10 | 0 | --- | --- |
| Titanium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Silver | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185(m) | >10 | <1 | --- | --- |
| Lead | ppm | ASTM D5185(m) | >20 | <1 | --- | --- |
| Copper | ppm | ASTM D5185(m) | >20 | 7 | --- | --- |
| Tin | ppm | ASTM D5185(m) | >10 | 0 | --- | --- |
| Vanadium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| White Metal | scalar | Visual* | NONE | NONE | --- | --- |
| Yellow Metal | scalar | Visual* | NONE | NONE | --- | --- |
| Silicon | ppm | ASTM D5185(m) | >15 | 2 | --- | --- |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | --- | --- |
| Water | | WC Method | >0.05 | NEG | --- | --- |
| Particles >4µm | | ASTM D7647 | >5000 | 728 | --- | --- |
| Particles >6µm | | ASTM D7647 | >1300 | 273 | --- | --- |
| Particles >14µm | | ASTM D7647 | >160 | 35 | --- | --- |
| Particles >21µm | | ASTM D7647 | >40 | 8 | --- | --- |
| Particles >38µm | | ASTM D7647 | >10 | 1 | --- | --- |
| Particles >71µm | | ASTM D7647 | >3 | 1 | --- | --- |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | 17/15/12 | --- | --- |
| 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 | --- | --- |
| Sodium | ppm | ASTM D5185(m) | | <1 | --- | --- |
| Boron | ppm | ASTM D5185(m) | 5 | 0 | --- | --- |
| Barium | ppm | ASTM D5185(m) | 5 | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185(m) | 5 | 0 | --- | --- |
| Manganese | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Magnesium | ppm | ASTM D5185(m) | 25 | 6 | --- | --- |
| Calcium | ppm | ASTM D5185(m) | 200 | 42 | --- | --- |
| Phosphorus | ppm | ASTM D5185(m) | 300 | 244 | --- | --- |
| Zinc | ppm | ASTM D5185(m) | 370 | 259 | --- | --- |
| Sulfur | ppm | ASTM D5185(m) | 2500 | 2665 | --- | --- |
| Acid Number (AN) | mg KOH/g | ASTM D974* | 0.57 | 0.27 | --- | --- |
| Visc @ 40°C | cSt | ASTM D7279(m) | 32 | 33.8 | --- | --- |

Particle Count

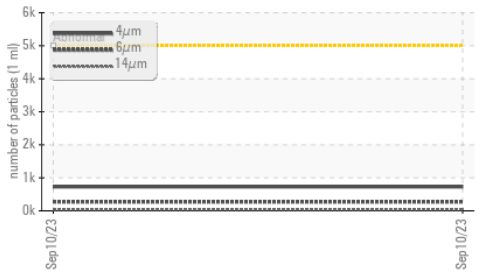



Acid Number

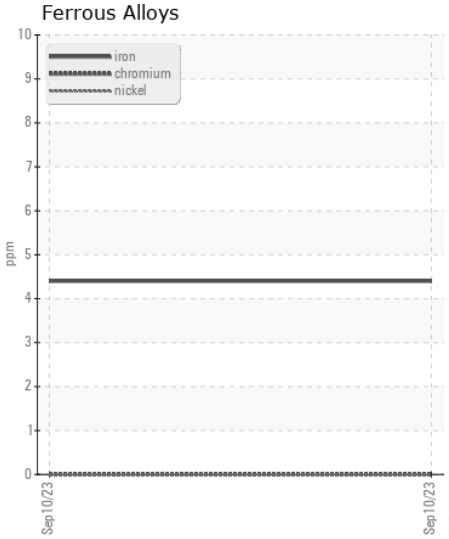

Viscosity @ 40°C



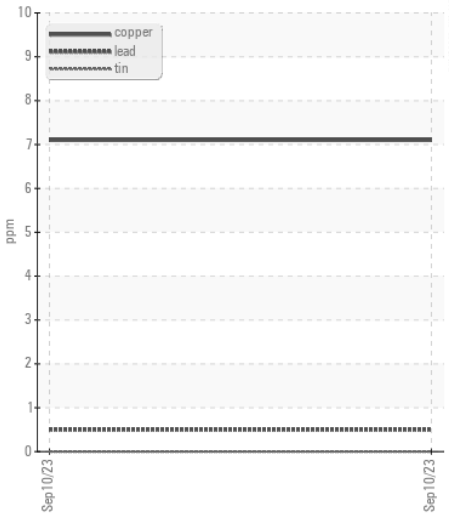

Particle Trend



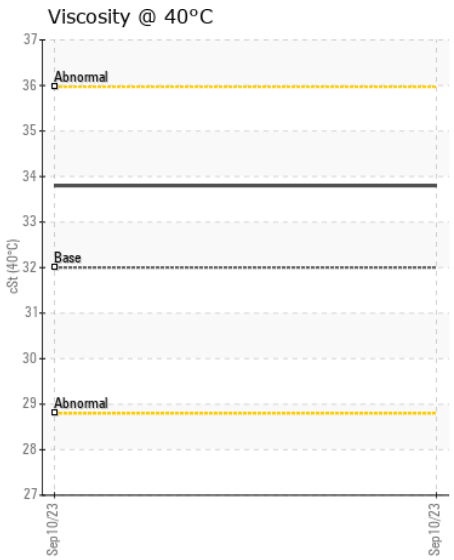

Ferrous Alloys



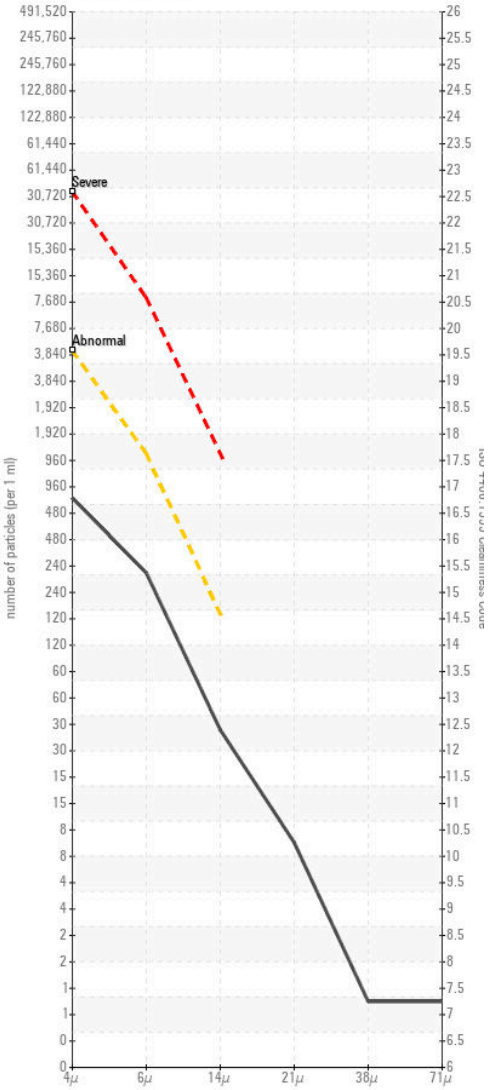

Non-ferrous Metals



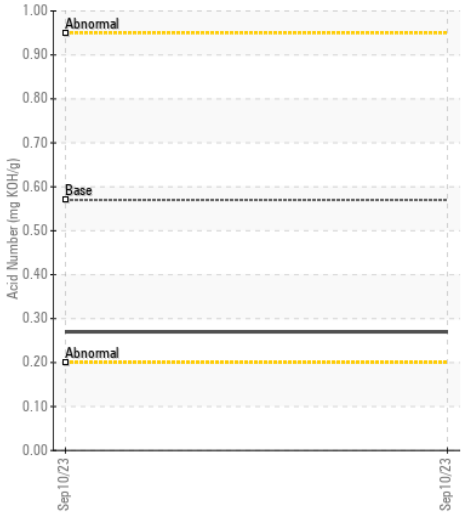

Viscosity @ 40°C




Particle Count




Acid Number




ISO 17025:2017 Accredited Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
**Sample No.** : PP
**Lab Number** : 02581388
**Unique Number** : 5642453
**Test Package** : IND 2

**Received** : 11 Sep 2023
**Tested** : 12 Sep 2023
**Diagnosed** : 12 Sep 2023 - Kevin Marson

*To discuss this sample report, contact Customer Service at 1-800-268-2131.*
*Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.*
*Validity of results and interpretation are based on the sample and information as supplied.*


**HIBERNIA MGMT & DEVELOPMENT CO. LTD**
SUITE 1000,, 100 NEW GOWER STREET
ST.JOHNS, NL
CA A1C 6K3
Contact: Sam Nash
samantha.m.nash@exxonmobil.com
T:
F: (709)722-3766