



OIL ANALYSIS REPORT

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

Area
[GH-9161A]

Machine Id
170831 DA

Component
Unknown Component

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. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | WC | PP | PP |
| Sample Date | | Client Info | | 13 Jun 2024 | 18 Apr 2024 | 07 Mar 2023 |
| Machine Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | N/A | N/A | N/A |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|---------------|------|-------------|------|------|
| PQ | | ASTM D8184* | | 0 | 0 | 0 |
| Iron | ppm | ASTM D5185(m) | | 6 | 6 | 3 |
| Chromium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | | 0 | 0 | <1 |
| Lead | ppm | ASTM D5185(m) | | 0 | <1 | <1 |
| Copper | ppm | ASTM D5185(m) | | 7 | 7 | 7 |
| Tin | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| White Metal | scalar | Visual* | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | Visual* | NONE | NONE | NONE | NONE |

CONTAMINATION

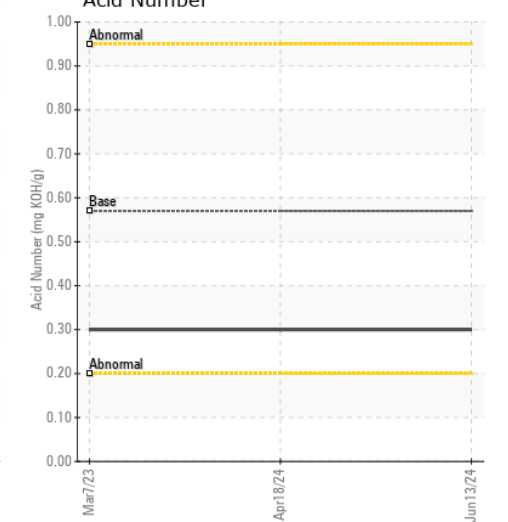
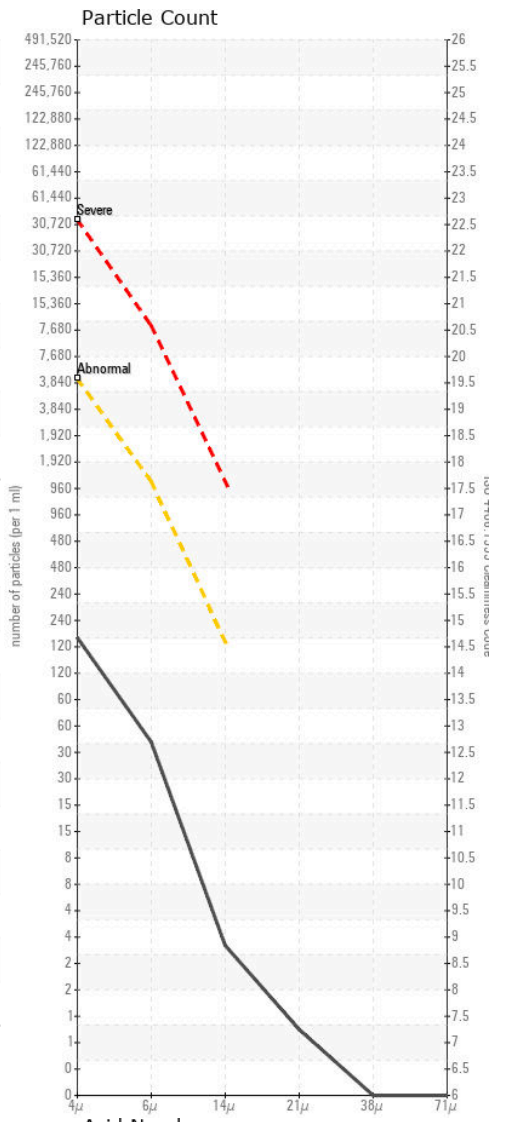
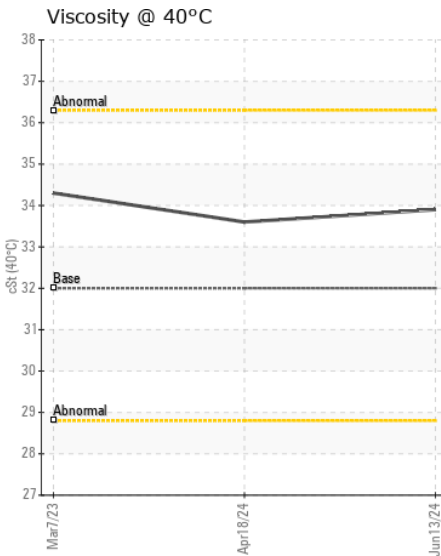
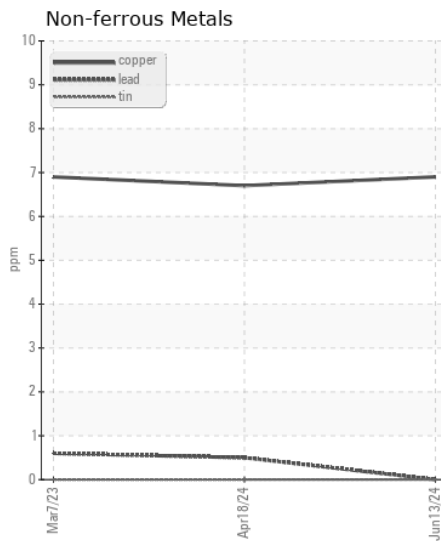
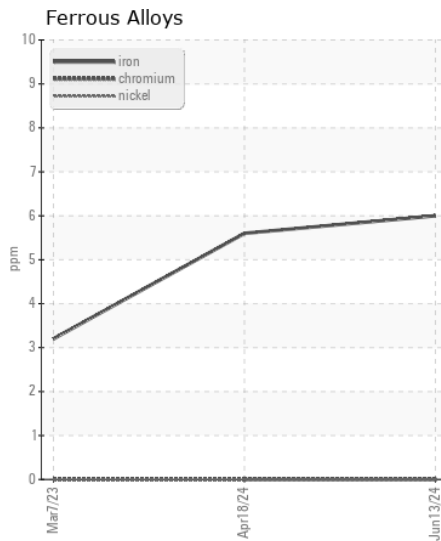
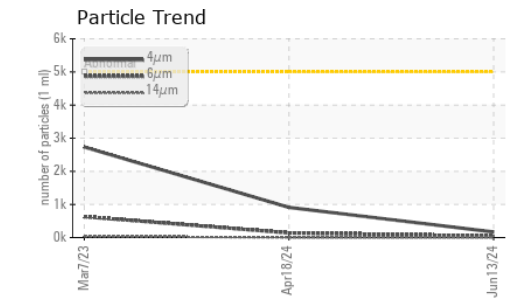
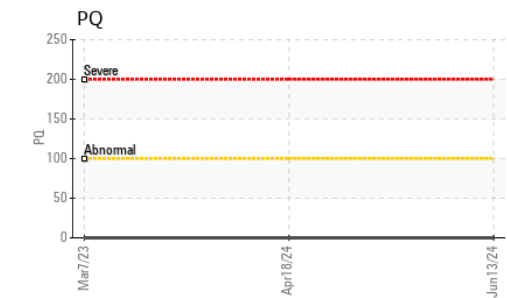
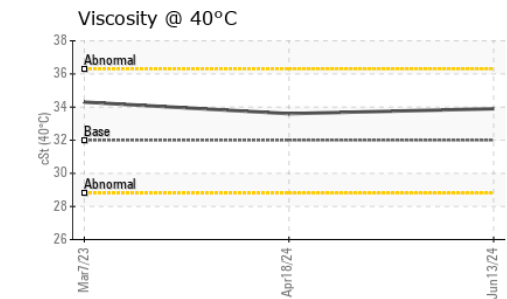
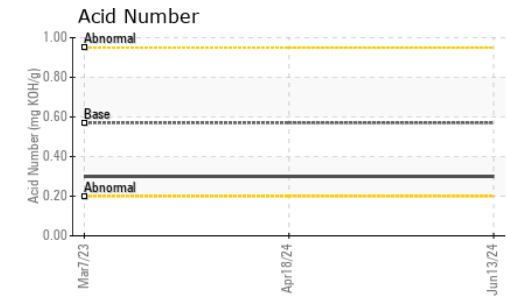
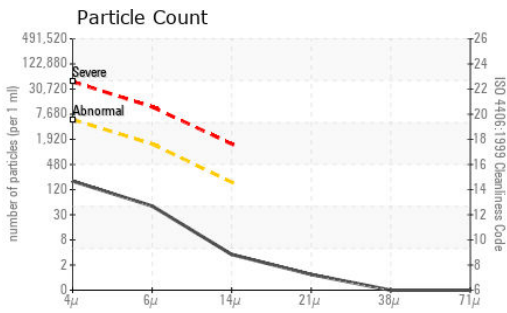
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

| | | | | | | |
|------------------|--------|---------------|-----------|----------------|---------|----------|
| Silicon | ppm | ASTM D5185(m) | | <1 | <1 | 2 |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | <1 | 0 |
| Water | | WC Method | | NEG | NEG | NEG |
| Particles >4µm | | ASTM D7647 | >5000 | 169 | 911 | 2734 |
| Particles >6µm | | ASTM D7647 | >1300 | 43 | 141 | 631 |
| Particles >14µm | | ASTM D7647 | >160 | 3 | 3 | 33 |
| Particles >21µm | | ASTM D7647 | >40 | 1 | 1 | 7 |
| Particles >38µm | | ASTM D7647 | >10 | 0 | 1 | 1 |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 1 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | 15/13/9 | 17/14/9 | 19/16/12 |
| Silt | scalar | Visual* | NONE | NONE | NONE | NONE |
| Debris | scalar | Visual* | NONE | NONE | NONE | NONE |
| Sand/Dirt | scalar | Visual* | NONE | NONE | NONE | NONE |
| Appearance | scalar | Visual* | NORML | NORML | NORML | NORML |
| Odor | scalar | Visual* | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | Visual* | | NEG | NEG | NEG |

FLUID CONDITION

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

| | | | | | | |
|------------------|----------|---------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185(m) | | <1 | <1 | 0 |
| Boron | ppm | ASTM D5185(m) | 5 | <1 | <1 | <1 |
| Barium | ppm | ASTM D5185(m) | 5 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 5 | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | | 0 | 0 | <1 |
| Magnesium | ppm | ASTM D5185(m) | 25 | 6 | 6 | 6 |
| Calcium | ppm | ASTM D5185(m) | 200 | 42 | 42 | 42 |
| Phosphorus | ppm | ASTM D5185(m) | 300 | 223 | 219 | 240 |
| Zinc | ppm | ASTM D5185(m) | 370 | 257 | 250 | 251 |
| Sulfur | ppm | ASTM D5185(m) | 2500 | 2522 | 2535 | 2670 |
| Acid Number (AN) | mg KOH/g | ASTM D974* | 0.57 | 0.30 | 0.30 | 0.30 |
| Visc @ 40°C | cSt | ASTM D7279(m) | 32 | 33.9 | 33.6 | 34.3 |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC
Lab Number : 02641991
Unique Number : 5799530
Test Package : IND 2 (Additional Tests: PQ, PRTCOUNT)

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

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.

T:
 F: (709)722-3766