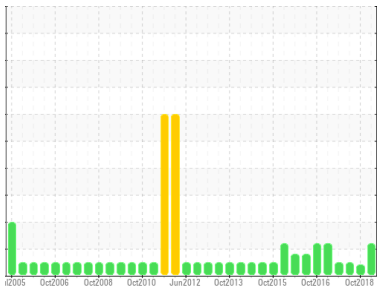
# OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Machine Id
## HCP G1 UGBR/THBR
Component
**Bearing**
Fluid
**ESSO TERESSO ISO 68 (364 LTR)**

## DIAGNOSIS

**Recommendation**
We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

**Wear**
All component wear rates are normal.

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

**Fluid Condition**
The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **WC0706192** | WC982592 | WC982484 |
| Sample Date | | Client Info | | **16 Apr 2024** | 24 Oct 2018 | 12 Apr 2018 |
| Machine Age | hrs | Client Info | | **0** | 0 | 0 |
| Oil Age | hrs | Client Info | | **0** | 0 | 0 |
| Oil Changed | | Client Info | | **N/A** | N/A | N/A |
| Sample Status | | | | **ABNORMAL** | ABNORMAL | NORMAL |

| CONTAMINATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Water | | WC Method | >2 | **NEG** | NEG | NEG |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185(m) | >63 | **5** | 4 | 3 |
| Chromium | ppm | ASTM D5185(m) | >20 | **0** | 0 | 0 |
| Nickel | ppm | ASTM D5185(m) | >20 | **<1** | <1 | 0 |
| Titanium | ppm | ASTM D5185(m) | | **0** | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | | **0** | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >2 | **<1** | <1 | <1 |
| Lead | ppm | ASTM D5185(m) | >161 | **50** | 46 | 48 |
| Copper | ppm | ASTM D5185(m) | >13 | **<1** | 0 | <1 |
| Tin | ppm | ASTM D5185(m) | >27 | **0** | 0 | 0 |
| Antimony | ppm | ASTM D5185(m) | | **0** | <1 | <1 |
| Vanadium | ppm | ASTM D5185(m) | | **0** | 0 | 0 |
| Beryllium | ppm | ASTM D5185(m) | | **0** | 0 | 0 |
| Cadmium | ppm | ASTM D5185(m) | | **0** | 0 | 0 |

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185(m) | 4.5 | **<1** | 0 | <1 |
| Barium | ppm | ASTM D5185(m) | 0.4 | **<1** | 0 | <1 |
| Molybdenum | ppm | ASTM D5185(m) | 0 | **0** | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | | **0** | <1 | 0 |
| Magnesium | ppm | ASTM D5185(m) | 0 | **0** | <1 | 0 |
| Calcium | ppm | ASTM D5185(m) | 0 | **1** | 1 | <1 |
| Phosphorus | ppm | ASTM D5185(m) | 0.7 | **7** | 2 | 1 |
| Zinc | ppm | ASTM D5185(m) | 0 | **4** | 1 | <1 |
| Sulfur | ppm | ASTM D5185(m) | 1315 | **1907** | 2002 | 1927 |
| Lithium | ppm | ASTM D5185(m) | | **<1** | 0 | <1 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185(m) | >12 | **2** | 1 | 1 |
| Sodium | ppm | ASTM D5185(m) | | **0** | 0 | <1 |
| Potassium | ppm | ASTM D5185(m) | >20 | **<1** | <1 | 0 |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | >10000 | ▲ **29003** | ▲ 39154 | 29550 |
| Particles >6µm | | ASTM D7647 | >2500 | ● **3278** | 2442 | 1552 |
| Particles >14µm | | ASTM D7647 | >160 | **108** | 50 | 24 |
| Particles >21µm | | ASTM D7647 | >40 | **23** | 11 | 7 |
| Particles >38µm | | ASTM D7647 | >10 | **3** | 0 | 0 |
| Particles >71µm | | ASTM D7647 | >3 | **0** | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >20/18/14 | ▲ **22/19/14** | ▲ 22/18/13 | 22/18/12 |

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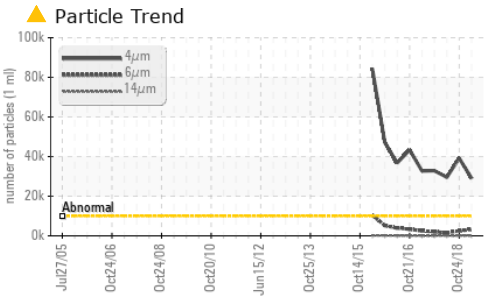
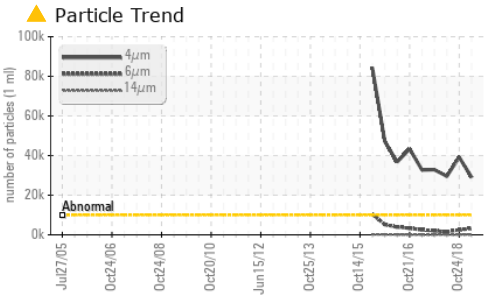
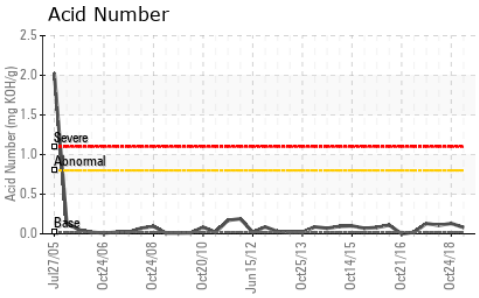
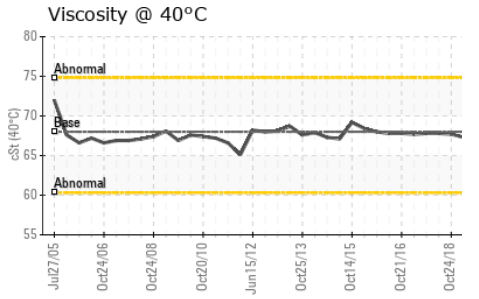


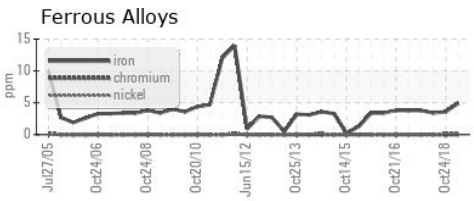

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D974* | 0.02 | **0.08** | 0.131 | 0.107 |

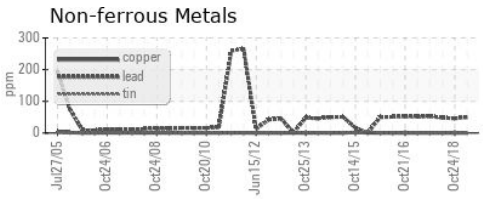
| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | Visual* | NONE | **NONE** | NONE | NONE |
| Yellow Metal | scalar | Visual* | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | Visual* | NONE | **NONE** | NONE | NONE |
| 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* | >2 | **NEG** | NEG | NEG |
| Free Water | scalar | Visual* | | **NEG** | NEG | NEG |

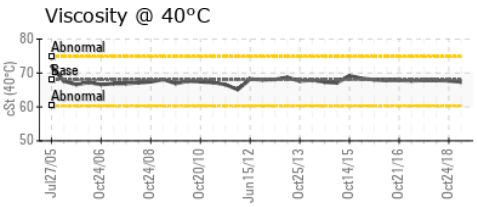
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D7279(m) | 68 | **67.3** | 67.7 | 67.8 |

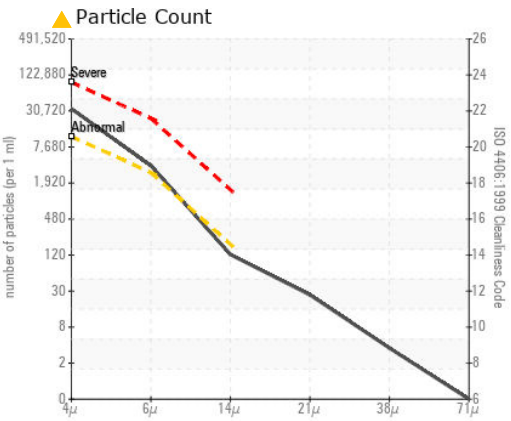
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | | | | |
| Bottom | | | | | |

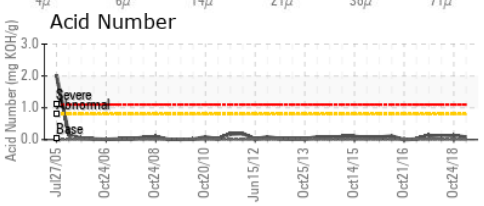

## GRAPHS




ISO 17025:2017 Accredited Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
**Sample No.** : WC0706192 **Received** : 19 Jun 2024
**Lab Number** : 02642916 **Tested** : 20 Jun 2024
**Unique Number** : 5800455 **Diagnosed** : 20 Jun 2024 - Wes Davis
**Test Package** : IND 2 ( Additional Tests: TAN Man )

*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.*

**NEWFOUNDLAND POWER INC.**
50 DUFFY PLACE, PO BOX 8910
ST. JOHNS, NL
CA A1B 3P6
Contact: Paul Martin
pmartin@newfoundlandpower.com
T:
F: (709)737-2926