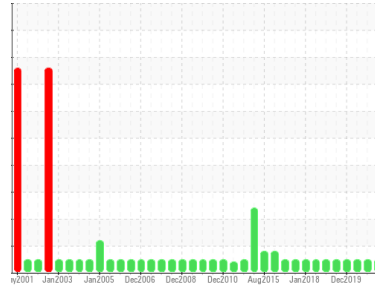




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
PIT G HPU/GOV

Component
Governor System

Fluid
ESSO TERESSO ISO 68 (30 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

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.

SAMPLE INFORMATION

| method | limit/base | current | history1 | history2 |
|---------------|-----------------|--------------------|-------------|-------------|
| Sample Number | Client Info | WC0445177 | WC0445188 | WC0327859 |
| Sample Date | Client Info | 12 Dec 2023 | 19 Jan 2022 | 14 Jun 2021 |
| Machine Age | yrs Client Info | 0 | 0 | 0 |
| Oil Age | yrs Client Info | 0 | 0 | 0 |
| Oil Changed | Client Info | N/A | N/A | N/A |
| Sample Status | | NORMAL | NORMAL | NORMAL |

CONTAMINATION

| method | limit/base | current | history1 | history2 |
|--------|----------------|------------|----------|----------|
| Water | WC Method >0.1 | NEG | NEG | NEG |

WEAR METALS

| method | limit/base | current | history1 | history2 |
|-----------|-----------------------|--------------|----------|----------|
| PQ | ASTM D8184* | 0 | 0 | 0 |
| Iron | ppm ASTM D5185(m) >50 | 0 | 0 | <1 |
| Chromium | ppm ASTM D5185(m) >10 | 0 | 0 | 0 |
| Nickel | ppm ASTM D5185(m) >10 | 0 | <1 | <1 |
| Titanium | ppm ASTM D5185(m) | 0 | 0 | 0 |
| Silver | ppm ASTM D5185(m) | 0 | 0 | 0 |
| Aluminum | ppm ASTM D5185(m) >3 | <1 | <1 | <1 |
| Lead | ppm ASTM D5185(m) >75 | 1 | 1 | <1 |
| Copper | ppm ASTM D5185(m) >15 | <1 | <1 | <1 |
| Tin | ppm ASTM D5185(m) >55 | 0 | 0 | <1 |
| Antimony | ppm ASTM D5185(m) >5 | 0 | 0 | 0 |
| 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

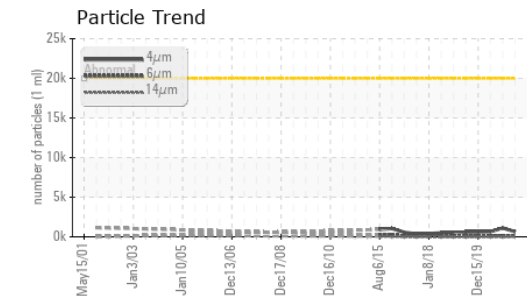
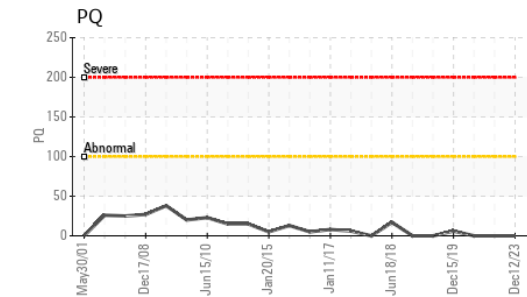
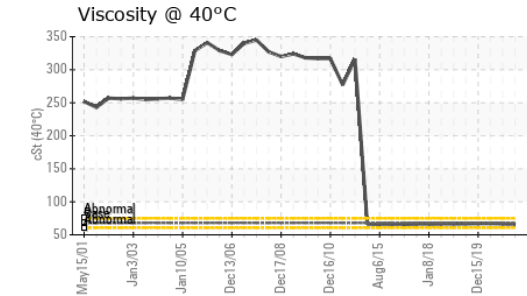
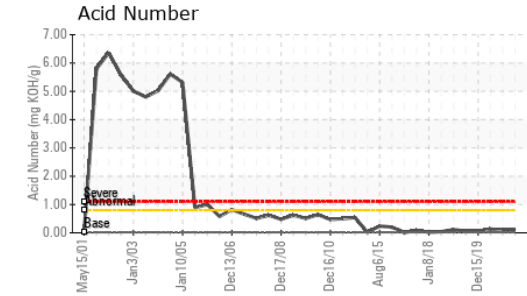
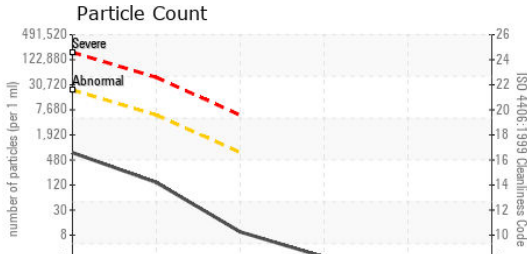
| method | limit/base | current | history1 | history2 |
|------------|------------------------|--------------|----------|----------|
| Boron | ppm ASTM D5185(m) 4.5 | 0 | <1 | <1 |
| Barium | ppm ASTM D5185(m) 0.4 | 0 | 0 | 0 |
| Molybdenum | ppm ASTM D5185(m) 0 | 0 | 0 | 0 |
| Manganese | ppm ASTM D5185(m) | 0 | 0 | 0 |
| Magnesium | ppm ASTM D5185(m) 0 | 0 | 0 | 0 |
| Calcium | ppm ASTM D5185(m) 0 | 4 | 5 | 5 |
| Phosphorus | ppm ASTM D5185(m) 0.7 | 32 | 16 | 17 |
| Zinc | ppm ASTM D5185(m) 0 | 20 | 16 | 18 |
| Sulfur | ppm ASTM D5185(m) 1315 | 2110 | 2076 | 2105 |
| Lithium | ppm ASTM D5185(m) | <1 | <1 | <1 |

CONTAMINANTS

| method | limit/base | current | history1 | history2 |
|-----------|-----------------------|--------------|----------|----------|
| Silicon | ppm ASTM D5185(m) >8 | <1 | <1 | <1 |
| Sodium | ppm ASTM D5185(m) | <1 | <1 | <1 |
| Potassium | ppm ASTM D5185(m) >20 | 1 | <1 | <1 |



OIL ANALYSIS REPORT



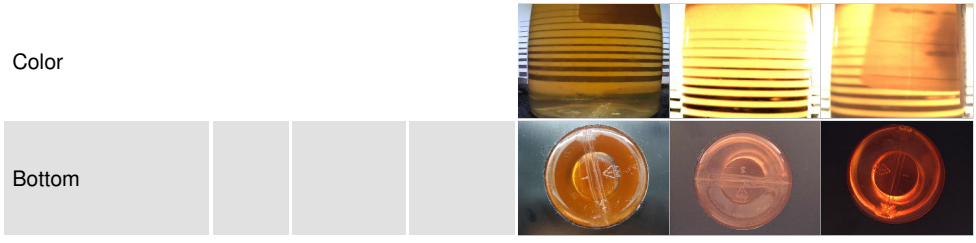
| FLUID CLEANLINESS | method | limit/base | current | history1 | history2 |
|-------------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm | ASTM D7647 | >20000 | 632 | 1117 | 650 |
| Particles >6µm | ASTM D7647 | >5000 | 122 | 101 | 98 |
| Particles >14µm | ASTM D7647 | >640 | 8 | 6 | 12 |
| Particles >21µm | ASTM D7647 | >160 | 2 | 1 | 4 |
| Particles >38µm | ASTM D7647 | >40 | 0 | 0 | 0 |
| Particles >71µm | ASTM D7647 | >10 | 0 | 0 | 0 |
| Oil Cleanliness | ISO 4406 (c) | >21/19/16 | 16/14/10 | 17/14/10 | 17/14/11 |

| FLUID DEGRADATION | method | limit/base | current | history1 | history2 | |
|-------------------|----------|------------|---------|-------------|----------|------|
| Acid Number (AN) | mg KOH/g | ASTM D974* | 0.02 | 0.12 | 0.10 | 0.13 |

| 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* | >0.1 | 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 | 65.0 | 66.6 | 67.1 |

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



Color

Bottom



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0445177 **Received** : 22 Dec 2023
Lab Number : **02604954** **Diagnosed** : 28 Dec 2023
Unique Number : 5698039 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: PQ, PrtCount, TAN Man)

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

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.