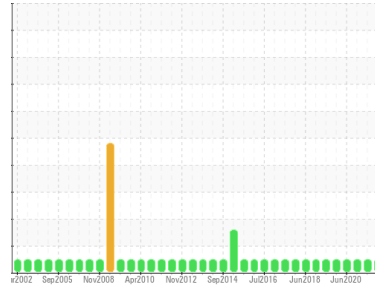




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**[193425]**  
 Machine Id  
**PUN G1 TUBR**  
 Component  
**Bearing**  
 Fluid  
**ESSO TERESSO ISO 68 (5 LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### 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 |        |            | <b>WC0445168</b>   | WC0445282   | WC0316895   |
| Sample Date        | Client Info |        |            | <b>29 Jun 2022</b> | 08 Oct 2021 | 14 Dec 2020 |
| Machine Age        | Client Info | Yrs    |            | <b>0</b>           | 0           | 0           |
| Oil Age            | Client Info | Yrs    |            | <b>0</b>           | 0           | 0           |
| Oil Changed        | Client Info |        |            | <b>Not Changed</b> | Not Changed | Not Changed |
| Sample Status      |             |        |            | <b>NORMAL</b>      | NORMAL      | NORMAL      |

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

| WEAR METALS |     | method        | limit/base | current      | history1 | history2 |
|-------------|-----|---------------|------------|--------------|----------|----------|
| PQ          |     | ASTM D8184*   |            | <b>0</b>     | 0        | 0        |
| Iron        | ppm | ASTM D5185(m) | >63        | <b>&lt;1</b> | 0        | <1       |
| Chromium    | ppm | ASTM D5185(m) |            | <b>0</b>     | 0        | 0        |
| Nickel      | ppm | ASTM D5185(m) |            | <b>0</b>     | <1       | 0        |
| Titanium    | ppm | ASTM D5185(m) |            | <b>0</b>     | 0        | 0        |
| Silver      | ppm | ASTM D5185(m) |            | <b>0</b>     | <1       | <1       |
| Aluminum    | ppm | ASTM D5185(m) | >2         | <b>&lt;1</b> | <1       | <1       |
| Lead        | ppm | ASTM D5185(m) | >161       | <b>1</b>     | 1        | 2        |
| Copper      | ppm | ASTM D5185(m) | >13        | <b>2</b>     | 1        | <1       |
| Tin         | ppm | ASTM D5185(m) | >27        | <b>&lt;1</b> | <1       | <1       |
| Antimony    | ppm | ASTM D5185(m) |            | <b>&lt;1</b> | 0        | 0        |
| Vanadium    | ppm | ASTM D5185(m) |            | <b>0</b>     | 0        | 0        |
| Beryllium   | ppm | ASTM D5185(m) |            | <b>0</b>     | 0        | 0        |
| Cadmium     | ppm | ASTM D5185(m) |            | <b>0</b>     | 0        | 0        |

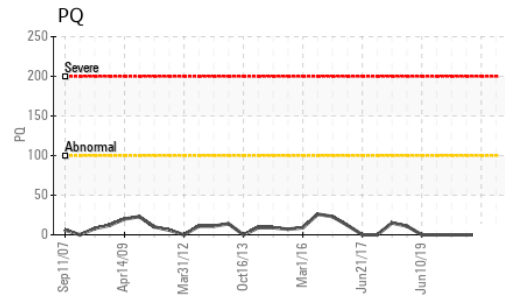
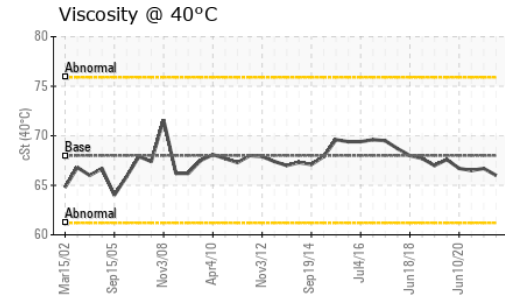
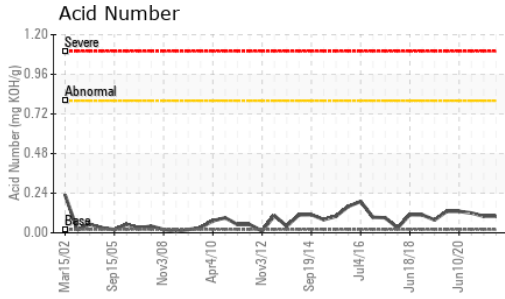
| ADDITIVES  |     | method        | limit/base | current      | history1 | history2 |
|------------|-----|---------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185(m) | 4.5        | <b>0</b>     | <1       | <1       |
| Barium     | ppm | ASTM D5185(m) | 0.4        | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm | ASTM D5185(m) | 0          | <b>0</b>     | 0        | 0        |
| Manganese  | ppm | ASTM D5185(m) |            | <b>0</b>     | 0        | 0        |
| Magnesium  | ppm | ASTM D5185(m) | 0          | <b>0</b>     | 0        | <1       |
| Calcium    | ppm | ASTM D5185(m) | 0          | <b>0</b>     | <1       | <1       |
| Phosphorus | ppm | ASTM D5185(m) | 0.7        | <b>40</b>    | 15       | <1       |
| Zinc       | ppm | ASTM D5185(m) | 0          | <b>6</b>     | 5        | 2        |
| Sulfur     | ppm | ASTM D5185(m) | 1315       | <b>2213</b>  | 2234     | 2326     |
| Lithium    | ppm | ASTM D5185(m) |            | <b>&lt;1</b> | <1       | <1       |

| CONTAMINANTS |     | method        | limit/base | current      | history1 | history2 |
|--------------|-----|---------------|------------|--------------|----------|----------|
| Silicon      | ppm | ASTM D5185(m) | >12        | <b>3</b>     | 3        | 4        |
| Sodium       | ppm | ASTM D5185(m) |            | <b>0</b>     | 0        | <1       |
| Potassium    | ppm | ASTM D5185(m) | >20        | <b>&lt;1</b> | <1       | <1       |

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



# OIL ANALYSIS REPORT



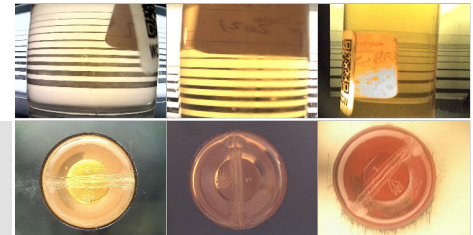
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | Visual*    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | Visual*    | NONE    | NONE     | NONE     |
|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

| FLUID PROPERTIES | method | limit/base    | current | history1 | history2 |
|------------------|--------|---------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D7279(m) | 68      | 66.0     | 66.7     |

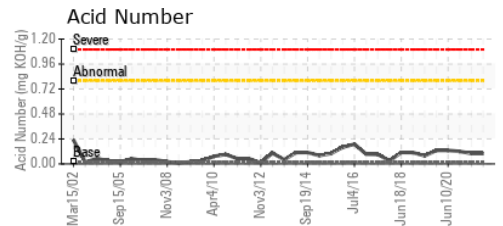
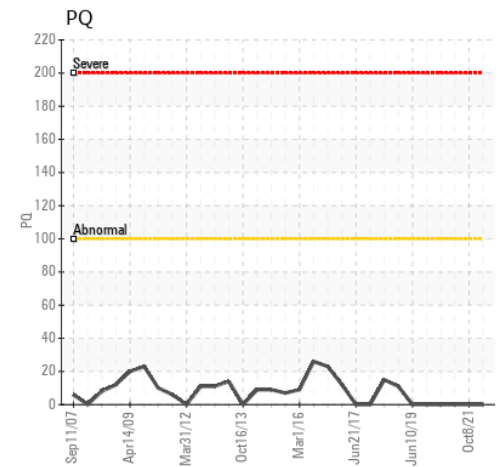
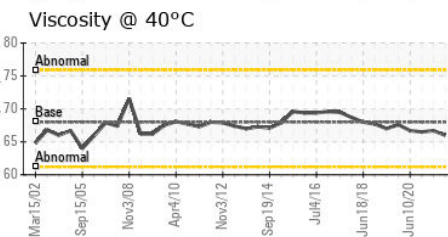
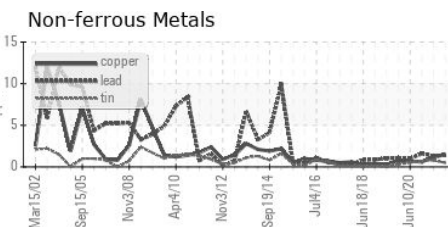
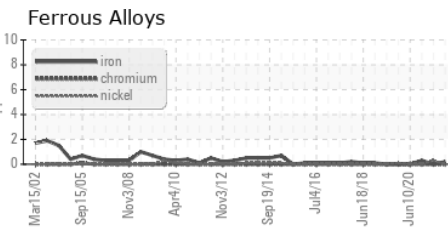
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|

Color

Bottom



## GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
 Sample No. : WC0445168      **Received** : 20 Oct 2022  
 Lab Number : **02517634**      **Diagnosed** : 24 Oct 2022  
 Unique Number : 5474614      **Diagnostician** : Kevin Marson  
 Test Package : IND 2 ( Additional Tests: TAN Man )

**NEWFOUNDLAND POWER INC.**  
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 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.