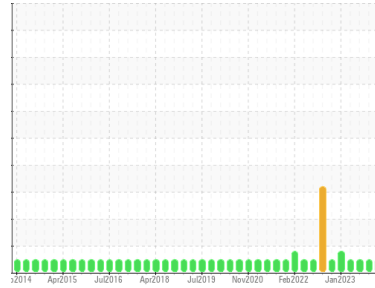




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**SAB2**  
 Machine Id  
**SAB2 G12 Governor**  
 Component  
**Hydraulic System**  
 Fluid  
**ESSO TERESSO ISO 46 (6160 LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.

### Wear

Component wear rates appear to be normal (unconfirmed).

### 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 | <b>WC0801603</b>   | WC0858060   | WC0830360   |
| Sample Date   | Client Info | <b>07 Jan 2024</b> | 25 Oct 2023 | 31 Jul 2023 |
| Machine Age   | hrs         | <b>0</b>           | 0           | 0           |
| Oil Age       | hrs         | <b>0</b>           | 0           | 0           |
| Oil Changed   | Client Info | <b>N/A</b>         | N/A         | N/A         |
| Sample Status |             | <b>NORMAL</b>      | NORMAL      | NORMAL      |

## CONTAMINATION

| method | limit/base      | current    | history1 | history2 |
|--------|-----------------|------------|----------|----------|
| Water  | WC Method >0.05 | <b>NEG</b> | NEG      | NEG      |

## WEAR METALS

| method    | limit/base            | current      | history1 | history2 |
|-----------|-----------------------|--------------|----------|----------|
| Iron      | ppm ASTM D5185(m) >20 | <b>&lt;1</b> | <1       | <1       |
| Chromium  | ppm ASTM D5185(m) >20 | <b>0</b>     | 0        | 0        |
| Nickel    | ppm ASTM D5185(m) >20 | <b>&lt;1</b> | <1       | <1       |
| Titanium  | ppm ASTM D5185(m)     | <b>0</b>     | 0        | 0        |
| Silver    | ppm ASTM D5185(m)     | <b>0</b>     | <1       | 0        |
| Aluminum  | ppm ASTM D5185(m) >20 | <b>&lt;1</b> | 0        | 0        |
| Lead      | ppm ASTM D5185(m) >20 | <b>&lt;1</b> | <1       | <1       |
| Copper    | ppm ASTM D5185(m) >20 | <b>0</b>     | <1       | <1       |
| Tin       | ppm ASTM D5185(m) >20 | <b>0</b>     | 0        | 0        |
| Antimony  | ppm ASTM D5185(m)     | <b>0</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) 0   | <b>0</b>     | <1       | <1       |
| Barium     | ppm ASTM D5185(m)     | <b>0</b>     | <1       | 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>&lt;1</b> | <1       | <1       |
| Phosphorus | ppm ASTM D5185(m) 2.4 | <b>&lt;1</b> | 2        | 2        |
| Zinc       | ppm ASTM D5185(m) 0   | <b>&lt;1</b> | <1       | 2        |
| Sulfur     | ppm ASTM D5185(m)     | <b>1929</b>  | 1838     | 2016     |
| Lithium    | ppm ASTM D5185(m)     | <b>&lt;1</b> | <1       | <1       |

## CONTAMINANTS

| method    | limit/base            | current      | history1 | history2 |
|-----------|-----------------------|--------------|----------|----------|
| Silicon   | ppm ASTM D5185(m) >15 | <b>0</b>     | 0        | 0        |
| Sodium    | ppm ASTM D5185(m)     | <b>0</b>     | 0        | 0        |
| Potassium | ppm ASTM D5185(m) >20 | <b>&lt;1</b> | 0        | <1       |

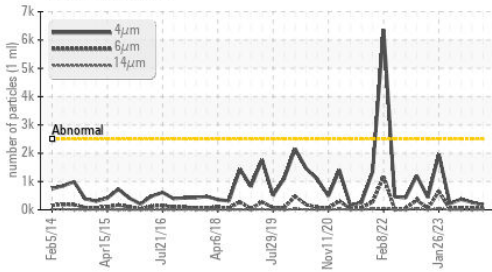
## FLUID CLEANLINESS

| method          | limit/base             | current         | history1 | history2 |
|-----------------|------------------------|-----------------|----------|----------|
| Particles >4µm  | ASTM D7647 >2500       | <b>170</b>      | 266      | 373      |
| Particles >6µm  | ASTM D7647 >640        | <b>50</b>       | 42       | 70       |
| Particles >14µm | ASTM D7647 >80         | <b>7</b>        | 3        | 6        |
| Particles >21µm | ASTM D7647 >20         | <b>3</b>        | 1        | 1        |
| Particles >38µm | ASTM D7647 >4          | <b>1</b>        | 0        | 0        |
| Particles >71µm | ASTM D7647 >3          | <b>0</b>        | 0        | 0        |
| Oil Cleanliness | ISO 4406 (c) >18/16/13 | <b>15/13/10</b> | 15/13/9  | 16/13/10 |

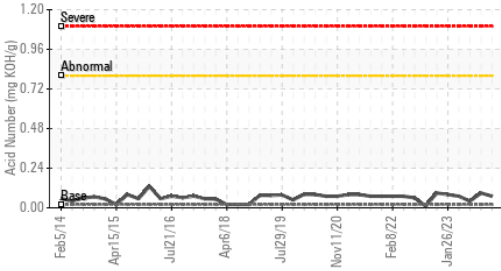


# OIL ANALYSIS REPORT

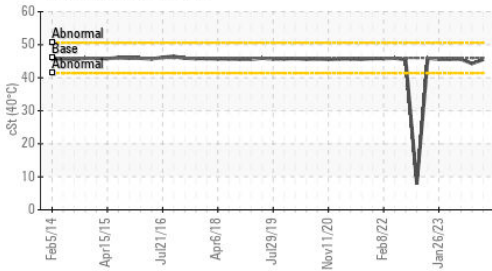
Particle Trend



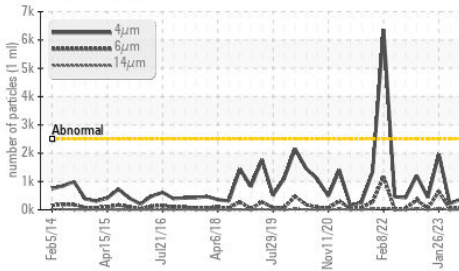
Acid Number



Viscosity @ 40°C



Particle Trend



**FLUID DEGRADATION** method limit/base current history1 history2

Acid Number (AN) mg KOH/g ASTM D974\* 0.02 **0.07** 0.09 0.04

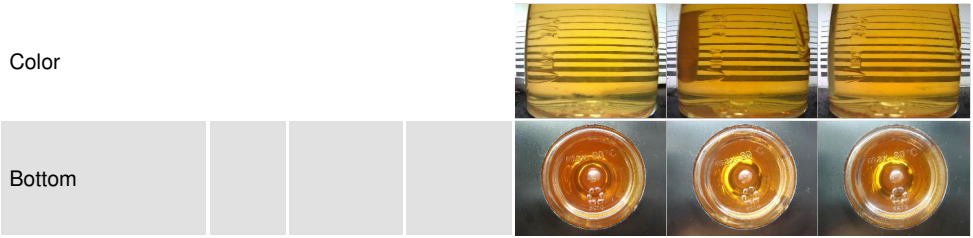
**VISUAL** method limit/base current history1 history2

|                  |        |         |       |              |       |       |
|------------------|--------|---------|-------|--------------|-------|-------|
| White Metal      | scalar | Visual* | NONE  | <b>NONE</b>  | NONE  | NONE  |
| Yellow Metal     | scalar | Visual* | NONE  | <b>NONE</b>  | NONE  | NONE  |
| Precipitate      | scalar | Visual* | NONE  | <b>NONE</b>  | NONE  | NONE  |
| Silt             | scalar | Visual* | NONE  | <b>NONE</b>  | NONE  | NONE  |
| Debris           | scalar | Visual* | NONE  | <b>NONE</b>  | NONE  | NONE  |
| Sand/Dirt        | scalar | Visual* | NONE  | <b>NONE</b>  | NONE  | NONE  |
| Appearance       | scalar | Visual* | NORML | <b>NORML</b> | NORML | NORML |
| Odor             | scalar | Visual* | NORML | <b>NORML</b> | NORML | NORML |
| Emulsified Water | scalar | Visual* | >0.05 | <b>NEG</b>   | NEG   | NEG   |
| Free Water       | scalar | Visual* |       | <b>NEG</b>   | NEG   | NEG   |

**FLUID PROPERTIES** method limit/base current history1 history2

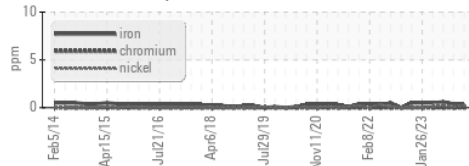
Visc @ 40°C cSt ASTM D7279(m) 46 **45.5** 44.3 45.6

**SAMPLE IMAGES** method limit/base current history1 history2

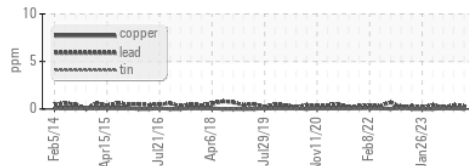


**GRAPHS**

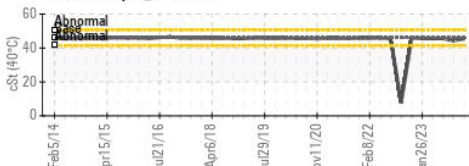
Ferrous Alloys



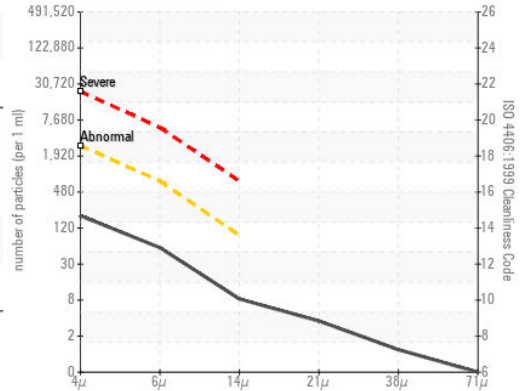
Non-ferrous Metals



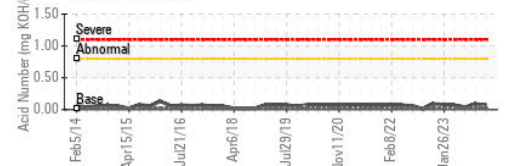
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
 Sample No. : WC0801603  
 Lab Number : 02607063  
 Unique Number : 5708149  
 Test Package : IND 2 ( Additional Tests: TAN Man )

**Ontario Power Generation**  
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 T: (905)357-0322  
 F: (905)357-6558

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.