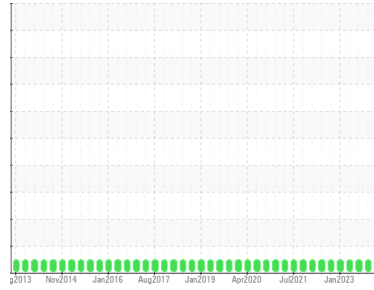




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
SAB2
 Machine Id
SAB2 G25

Component
Middle Guide Bearing
 Fluid
ESSO TERESSO ISO 46 (364 LTR)

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 | | | WC0801625 | WC0858106 | WC0830406 |
| Sample Date | Client Info | | | 07 Jan 2024 | 25 Oct 2023 | 31 Jul 2023 |
| 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 | | | | NORMAL | NORMAL | 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) | >20 | 2 | 2 | 2 |
| 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 | <1 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >20 | <1 | 0 | 0 |
| Lead | ppm | ASTM D5185(m) | >20 | 23 | 25 | 27 |
| Copper | ppm | ASTM D5185(m) | >20 | <1 | 1 | 1 |
| Tin | ppm | ASTM D5185(m) | >20 | 0 | 0 | 0 |
| Antimony | ppm | ASTM D5185(m) | | 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) | 0 | 0 | <1 | <1 |
| Barium | ppm | ASTM D5185(m) | | <1 | <1 | <1 |
| 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 | <1 |
| Calcium | ppm | ASTM D5185(m) | 0 | <1 | 1 | 1 |
| Phosphorus | ppm | ASTM D5185(m) | 2.4 | 2 | 3 | 4 |
| Zinc | ppm | ASTM D5185(m) | 0 | 2 | 2 | 3 |
| Sulfur | ppm | ASTM D5185(m) | | 1262 | 1206 | 1315 |
| Lithium | ppm | ASTM D5185(m) | | <1 | <1 | <1 |

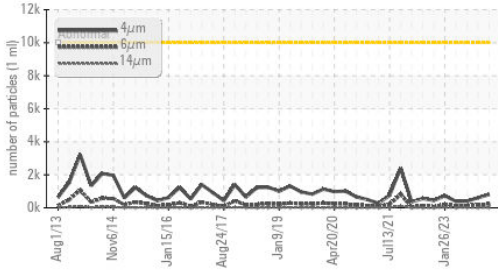
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|---------------|------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185(m) | >15 | 6 | 7 | 8 |
| Sodium | ppm | ASTM D5185(m) | | 0 | 0 | <1 |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | 0 | <1 |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|-------------------|--|--------------|------------|-----------------|----------|----------|
| Particles >4µm | | ASTM D7647 | >10000 | 804 | 610 | 408 |
| Particles >6µm | | ASTM D7647 | >1300 | 218 | 183 | 135 |
| Particles >14µm | | ASTM D7647 | >160 | 12 | 15 | 18 |
| Particles >21µm | | ASTM D7647 | >40 | 3 | 4 | 5 |
| Particles >38µm | | ASTM D7647 | >10 | 1 | 1 | 0 |
| Particles >71µm | | ASTM D7647 | >3 | 1 | 1 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >20/17/14 | 17/15/11 | 16/15/11 | 16/14/11 |

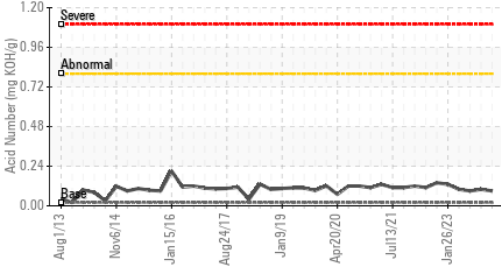


OIL ANALYSIS REPORT

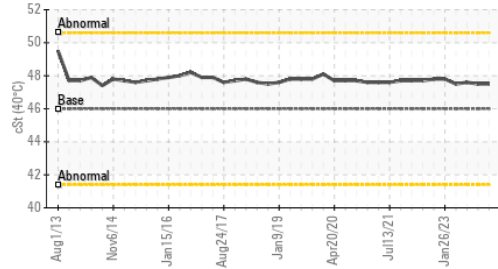
Particle Trend



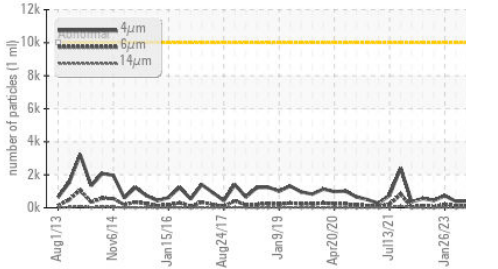
Acid Number



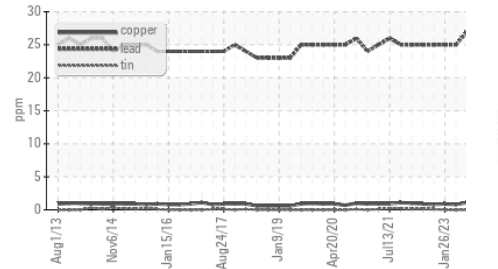
Viscosity @ 40°C



Particle Trend



Non-ferrous Metals



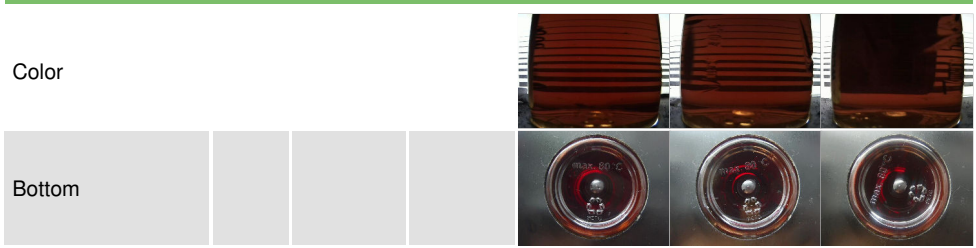
FLUID DEGRADATION

| method | limit/base | current | history1 | history2 | |
|------------------|---------------------|---------|--------------|----------|-------|
| Acid Number (AN) | mg KOH/g ASTM D974* | 0.02 | 0.09 | 0.10 | 0.09 |
| 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

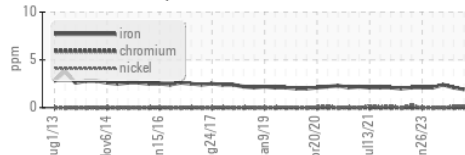
| method | limit/base | current | history1 | history2 | |
|-------------|-------------------|---------|-------------|----------|------|
| Visc @ 40°C | cSt ASTM D7279(m) | 46 | 47.5 | 47.5 | 47.6 |

SAMPLE IMAGES

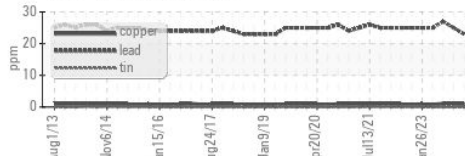


GRAPHS

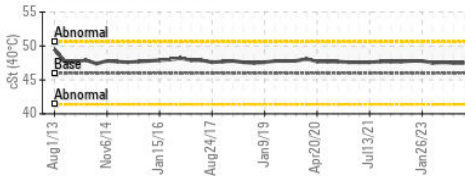
Ferrous Alloys



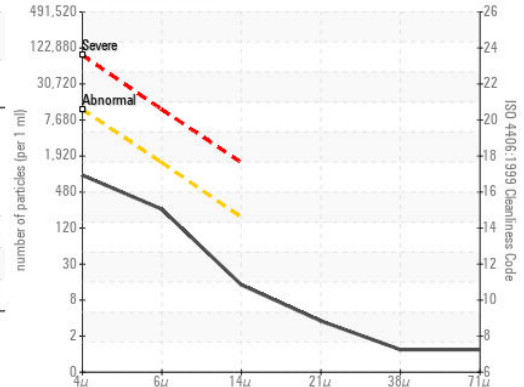
Non-ferrous Metals



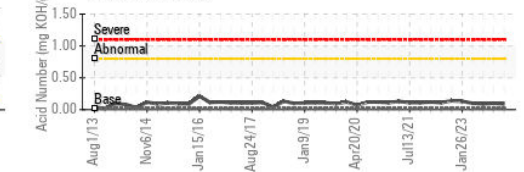
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0801625 **Received** : 08 Jan 2024
Lab Number : **02607099** **Diagnosed** : 09 Jan 2024
Unique Number : 5708185 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: TAN Man)

Ontario Power Generation
 NIAGARA PLANT GROUP, 14000 NIAGARA PKWY
 NIAGARA ON THE LAKE, ON
 CA L0S 1J0
 Contact: Alex Courtemanche
 alex.courtemanche@opg.com
 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.