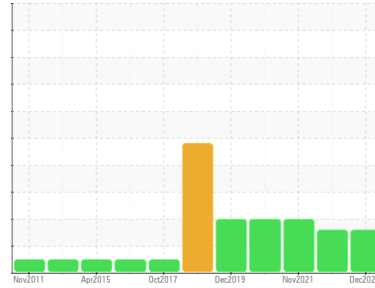




OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Machine Id
GENERAL ELECTRIC MCKENZIE G.S.

Component
Governor System

Fluid
ESSO TERESSO ISO 68 (160 LTR)

DIAGNOSIS

Recommendation

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Elemental level of silicon (Si) above normal indicating ingress of seal material.

Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. 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 | | WC0666785 | WC0666776 | WC0666778 |
| Sample Date | Client Info | | 19 Dec 2023 | 23 Nov 2022 | 22 Nov 2021 |
| Machine Age | yrs | Client Info | 86 | 85 | 83 |
| Oil Age | yrs | Client Info | 13 | 12 | 11 |
| Oil Changed | Client Info | | N/A | N/A | N/A |
| Sample Status | | | ABNORMAL | ABNORMAL | ABNORMAL |

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 | 2 | 2 | 2 |
| Chromium | ppm | ASTM D5185(m) >10 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185(m) >10 | <1 | <1 | 0 |
| Titanium | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) >3 | <1 | 0 | <1 |
| Lead | ppm | ASTM D5185(m) >75 | 28 | 31 | 34 |
| Copper | ppm | ASTM D5185(m) >15 | <1 | 2 | 2 |
| Tin | ppm | ASTM D5185(m) >55 | 0 | 0 | 0 |
| 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 | 1 | 1 | 2 |
| Phosphorus | ppm | ASTM D5185(m) 0.7 | 36 | 47 | ▲ 45 |
| Zinc | ppm | ASTM D5185(m) 0 | 5 | 7 | 8 |
| Sulfur | ppm | ASTM D5185(m) 1315 | 1317 | 1439 | 1507 |
| Lithium | ppm | ASTM D5185(m) | <1 | <1 | <1 |

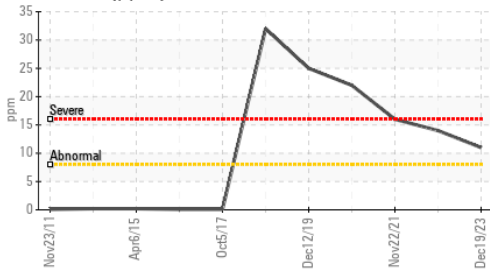
CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|-------------------|-------------|----------|----------|
| Silicon | ppm | ASTM D5185(m) >8 | ▲ 11 | ▲ 14 | ▲ 16 |
| Sodium | ppm | ASTM D5185(m) | 0 | <1 | 0 |
| Potassium | ppm | ASTM D5185(m) >20 | 0 | 0 | <1 |

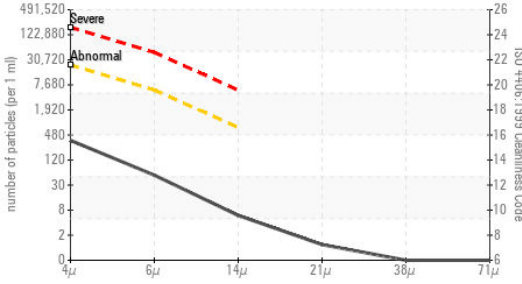


OIL ANALYSIS REPORT

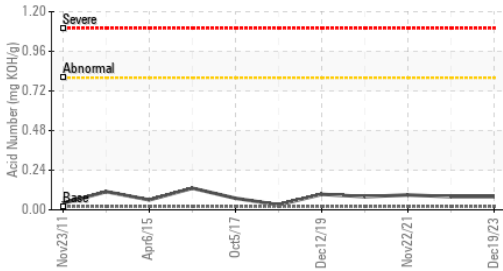
▲ Silicon (ppm)



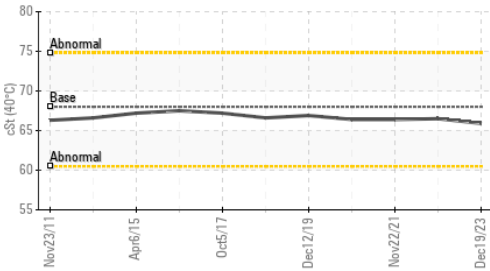
Particle Count



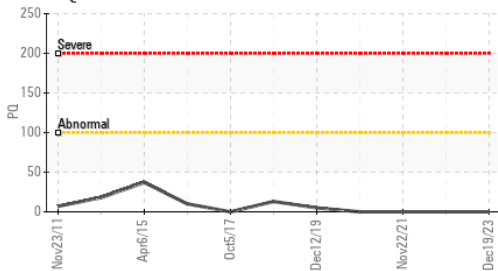
Acid Number



Viscosity @ 40°C



PQ



| FLUID CLEANLINESS | method | limit/base | current | history1 | history2 |
|-------------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm | ASTM D7647 | >20000 | 314 | 1521 | 3969 |
| Particles >6µm | ASTM D7647 | >5000 | 46 | 232 | 420 |
| Particles >14µm | ASTM D7647 | >640 | 5 | 20 | 26 |
| Particles >21µm | ASTM D7647 | >160 | 1 | 7 | 7 |
| Particles >38µm | ASTM D7647 | >40 | 0 | 0 | 0 |
| Particles >71µm | ASTM D7647 | >10 | 0 | 0 | 0 |
| Oil Cleanliness | ISO 4406 (c) | >21/19/16 | 15/13/10 | 18/15/11 | 19/16/12 |

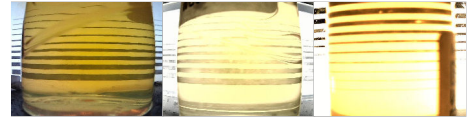
| FLUID DEGRADATION | method | limit/base | current | history1 | history2 | |
|-------------------|----------|------------|---------|-------------|----------|------|
| Acid Number (AN) | mg KOH/g | ASTM D974* | 0.02 | 0.08 | 0.08 | 0.09 |

| 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* | >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 | 65.9 | 66.5 | 66.4 |

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

Color



Bottom



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
 Sample No. : WC0666785 Recieved : 28 Dec 2023
 Lab Number : 02605553 Diagnosed : 03 Jan 2024
 Unique Number : 5698638 Diagnostician : Kevin Marson
 Test Package : IND 2 (Additional Tests: PQ, PrtCount, 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.

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