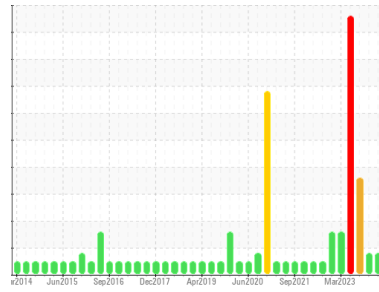




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
4 Laminator
 Machine Id
54-0161 Menzel
 Component
Hydraulic System
 Fluid
SUNOCO SUNVIS 846 ISO 46 (36 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Copper ppm levels are noted. All other 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 | | WC0867486 | WC0837277 | WC0837265 |
| Sample Date | Client Info | | 21 Mar 2024 | 04 Jan 2024 | 03 Oct 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 | | | ATTENTION | ATTENTION | ATTENTION |

CONTAMINATION

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

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|-----------|-------------|-------------------|--------------|----------|----------|
| PQ | ASTM D8184* | | 47 | 34 | 36 |
| Iron | ppm | ASTM D5185(m) >20 | 62 | 63 | 63 |
| Chromium | ppm | ASTM D5185(m) >20 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185(m) >20 | <1 | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185(m) >20 | 0 | <1 | 0 |
| Lead | ppm | ASTM D5185(m) >20 | 6 | 7 | 7 |
| Copper | ppm | ASTM D5185(m) >20 | 31 | 31 | 31 |
| 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 |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | <1 |
| Molybdenum | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185(m) | <1 | <1 | 0 |
| Calcium | ppm | ASTM D5185(m) | 4 | 4 | 4 |
| Phosphorus | ppm | ASTM D5185(m) | 313 | 328 | 325 |
| Zinc | ppm | ASTM D5185(m) | 239 | 240 | 248 |
| Sulfur | ppm | ASTM D5185(m) | 1832 | 1991 | 1879 |
| Lithium | ppm | ASTM D5185(m) | <1 | <1 | <1 |

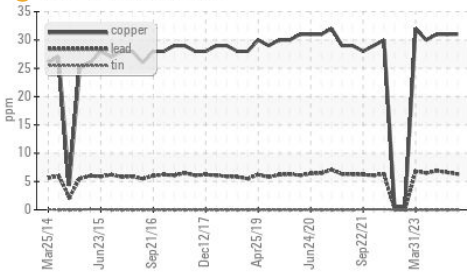
CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|-------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185(m) >15 | 0 | <1 | <1 |
| Sodium | ppm | ASTM D5185(m) | 2 | 2 | 2 |
| Potassium | ppm | ASTM D5185(m) >20 | <1 | 4 | 0 |

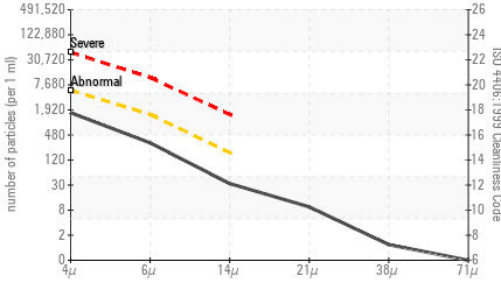


OIL ANALYSIS REPORT

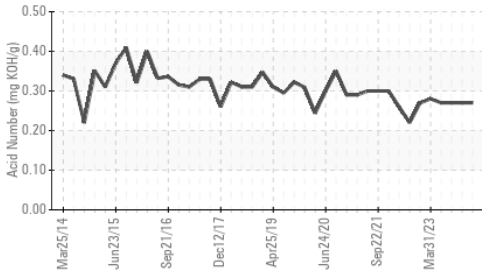
Non-ferrous Metals



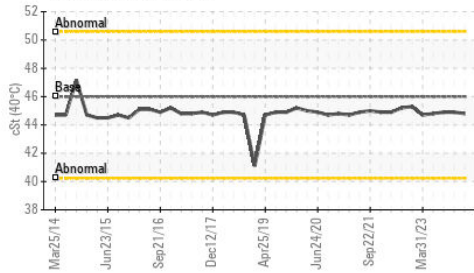
Particle Count



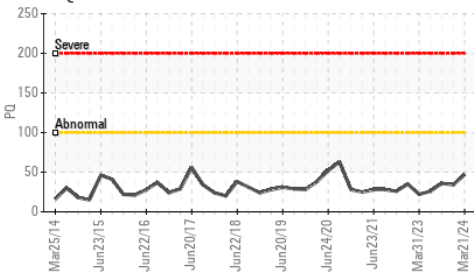
Acid Number



Viscosity @ 40°C



PQ



| FLUID CLEANLINESS | method | limit/base | current | history1 | history2 |
|-------------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm | ASTM D7647 | >5000 | 1437 | 1709 | 5326 |
| Particles >6µm | ASTM D7647 | >1300 | 273 | 365 | 1717 |
| Particles >14µm | ASTM D7647 | >160 | 29 | 38 | 210 |
| Particles >21µm | ASTM D7647 | >40 | 8 | 9 | 65 |
| Particles >38µm | ASTM D7647 | >10 | 1 | 1 | 2 |
| Particles >71µm | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | ISO 4406 (c) | >19/17/14 | 18/15/12 | 18/16/12 | 20/18/15 |

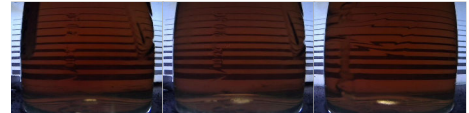
| FLUID DEGRADATION | method | limit/base | current | history1 | history2 |
|-------------------|---------------------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g ASTM D974* | | 0.27 | 0.27 | 0.27 |

| 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* | >0.05 | 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) | 46.0 | 44.8 | 44.9 | 44.9 |

SAMPLE IMAGES

Color



Bottom



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0867486
Lab Number : 02626634
Unique Number : 5759766
Test Package : IND 2 (Additional Tests: PQ)

CANADIAN GENERAL TOWER LTD.
 52 MIDDLETON STREET, P.O. BOX 160
 CAMBRIDGE, ON
 CA N1S 2R4
 Contact: Bob Abell
 bob.abell@cgtower.com
 T: (519)623-1630
 F: (519)623-7018

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.