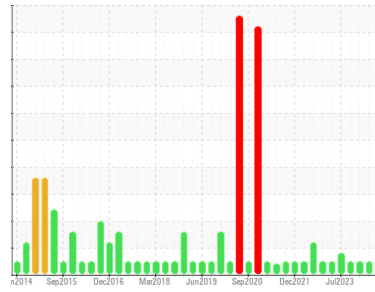




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
6 Calender Line
 Machine Id
39-0721Menzel Hydraulics
 Component
Hydraulic System
 Fluid
SUNOCO SUNVIS 846 ISO 46 (80 GAL)

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 | | | WC0926957 | WC0867482 | WC0837283 |
| Sample Date | Client Info | | | 06 Jun 2024 | 21 Mar 2024 | 04 Jan 2024 |
| 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 | | >0.05 | NEG | NEG | NEG |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|-------------|-----|---------------|------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185(m) | >20 | 5 | 0 | 5 |
| Chromium | ppm | ASTM D5185(m) | >20 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185(m) | >20 | <1 | 0 | <1 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >20 | <1 | 0 | <1 |
| Lead | ppm | ASTM D5185(m) | >20 | 0 | 0 | 0 |
| 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 |

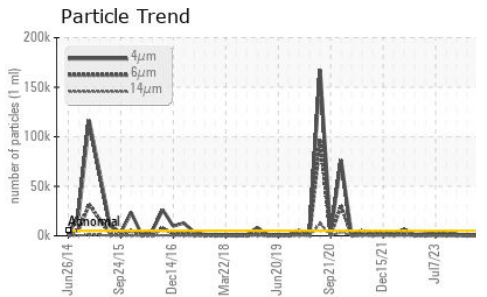
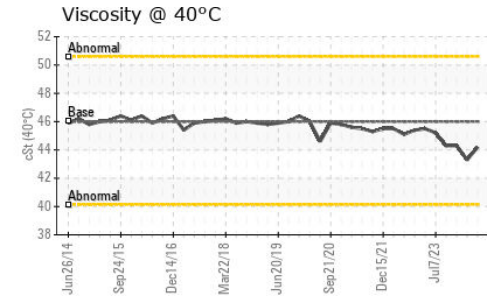
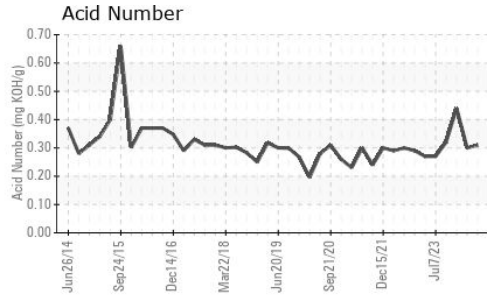
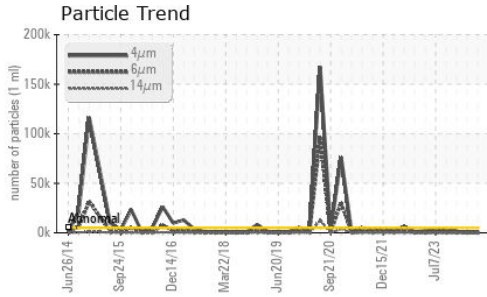
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|---------------|------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185(m) | | <1 | 0 | <1 |
| Calcium | ppm | ASTM D5185(m) | | 35 | 33 | 37 |
| Phosphorus | ppm | ASTM D5185(m) | | 232 | 238 | 242 |
| Zinc | ppm | ASTM D5185(m) | | 298 | 304 | 294 |
| Sulfur | ppm | ASTM D5185(m) | | 5049 | 5381 | 5340 |
| Lithium | ppm | ASTM D5185(m) | | <1 | <1 | <1 |

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

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|-------------------|--|--------------|------------|-----------------|----------|----------|
| Particles >4µm | | ASTM D7647 | >5000 | 795 | 142 | 1527 |
| Particles >6µm | | ASTM D7647 | >1300 | 176 | 29 | 452 |
| Particles >14µm | | ASTM D7647 | >160 | 16 | 3 | 49 |
| Particles >21µm | | ASTM D7647 | >40 | 5 | 2 | 14 |
| Particles >38µm | | ASTM D7647 | >10 | 1 | 1 | 1 |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 1 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | 17/15/11 | 14/12/9 | 18/16/13 |



OIL ANALYSIS REPORT

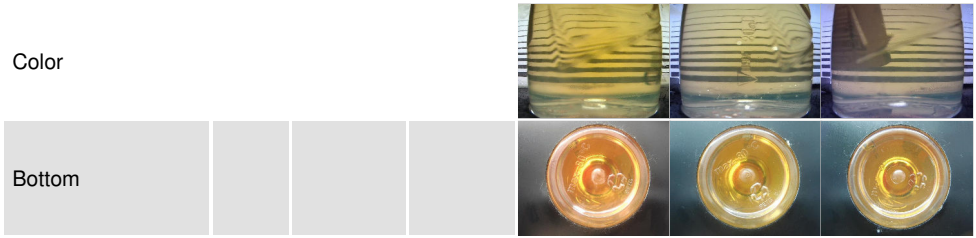


| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D974* | | 0.31 | 0.30 | 0.44 |

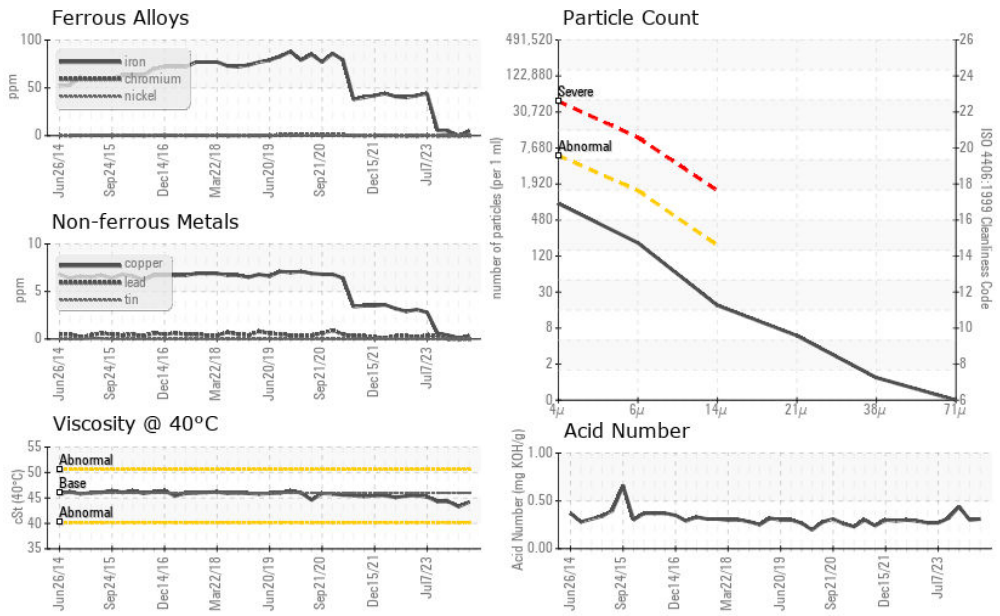
| VISUAL | | method | limit/base | current | history1 | history2 |
|------------------|--------|---------|------------|--------------|----------|----------|
| White Metal | scalar | Visual* | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | Visual* | NONE | NONE | NONE | NONE |
| Precipitate | scalar | 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 | 44.2 | 43.3 | 44.3 |

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
 Sample No. : WC0926957
 Lab Number : 02644825
 Unique Number : 5802364
 Test Package : IND 2

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.