

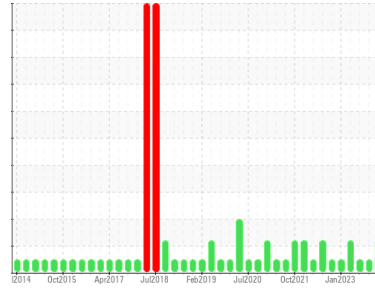


OIL ANALYSIS REPORT

Sample Rating Trend

VISUAL METAL

Area
SAB2
 Machine Id
SAB2 G20
 Component
Thrust Bearing
 Fluid
PETRO CANADA TURBOFLO XL46 (5000 LTR)



DIAGNOSIS

Recommendation

We advise that you check for visible metal particles in the oil. We recommend an early resample to monitor this condition.

Wear

Light concentration of visible metal present.

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 | | WC0801597 | WC0858090 | WC0830390 |
| 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 | | | MARGINAL | 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) | >85 | 1 | 1 | 2 |
| 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 | <1 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >40 | <1 | 0 | <1 |
| Lead | ppm | ASTM D5185(m) | >60 | <1 | <1 | <1 |
| Copper | ppm | ASTM D5185(m) | >7 | <1 | <1 | <1 |
| Tin | ppm | ASTM D5185(m) | >40 | 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 | <1 | 0 |
| Barium | ppm | ASTM D5185(m) | | 0 | <1 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185(m) | | 0 | 0 | <1 |
| Calcium | ppm | ASTM D5185(m) | | <1 | <1 | <1 |
| Phosphorus | ppm | ASTM D5185(m) | | 0 | 1 | 1 |
| Zinc | ppm | ASTM D5185(m) | 0 | 1 | 1 | 2 |
| Sulfur | ppm | ASTM D5185(m) | | 663 | 647 | 700 |
| Lithium | ppm | ASTM D5185(m) | | <1 | <1 | <1 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 | |
|-----------|--------|---------------|---------|--------------|----------|----|
| Silicon | ppm | ASTM D5185(m) | >20 | 3 | 2 | 3 |
| Sodium | ppm | ASTM D5185(m) | | 0 | <1 | 0 |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | 0 | <1 |

FLUID CLEANLINESS

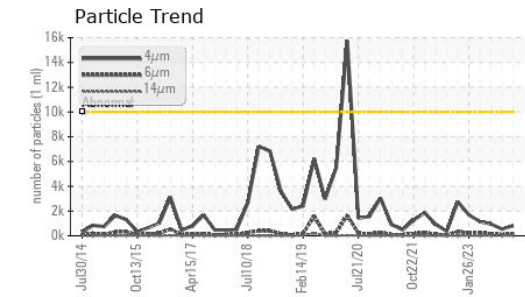
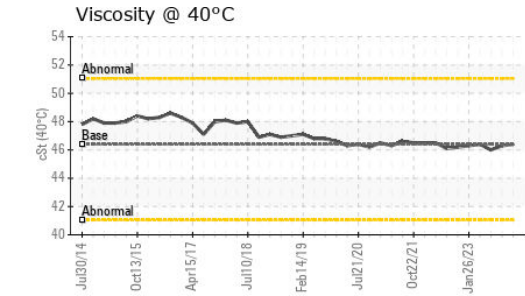
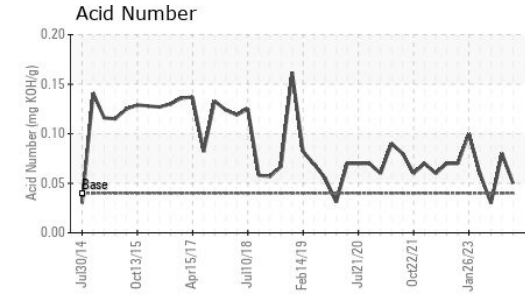
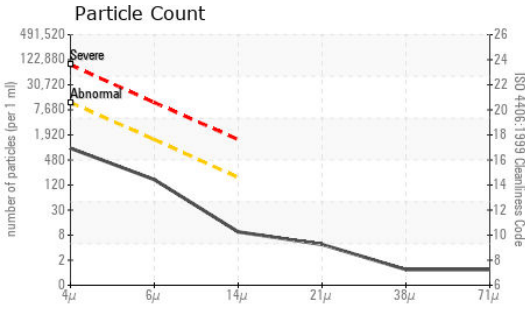
| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm | ASTM D7647 | >10000 | 805 | 545 | 945 |
| Particles >6µm | ASTM D7647 | >1300 | 143 | 93 | 181 |
| Particles >14µm | ASTM D7647 | >160 | 8 | 5 | 12 |
| Particles >21µm | ASTM D7647 | >40 | 4 | 2 | 4 |
| Particles >38µm | ASTM D7647 | >10 | 1 | 1 | 0 |
| Particles >71µm | ASTM D7647 | >3 | 1 | 1 | 0 |
| Oil Cleanliness | ISO 4406 (c) | >20/17/14 | 17/14/10 | 16/14/10 | 17/15/11 |

Particle Filter (Magn: 200 x)





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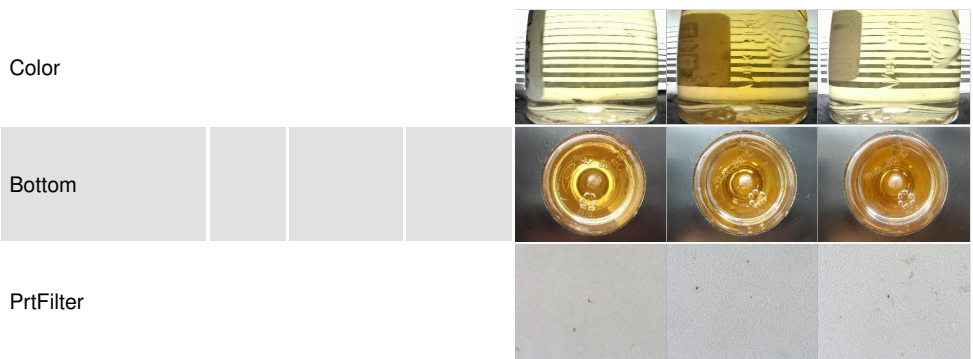


| FLUID DEGRADATION | method | limit/base | current | history1 | history2 | |
|-------------------|----------|------------|---------|-------------|----------|------|
| Acid Number (AN) | mg KOH/g | ASTM D974* | 0.04 | 0.05 | 0.08 | 0.03 |

| VISUAL | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|----------------|----------|-------|
| White Metal | scalar | Visual* | NONE | ▲ VLITE | 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) | 46.39 | 46.4 | 46.3 | 46.0 |

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



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0801597
Lab Number : **02607110**
Unique Number : 5708196
Test Package : IND 2 (Additional Tests: BottomAnalysis, FilterPatch, PrtFilter, TAN Man)

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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.