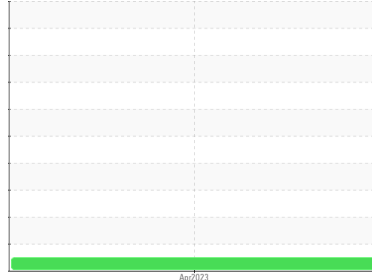


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
30070

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|--------------------|-------------|-------------|------------|--------------------|----------|----------|
| Sample Number | Client Info | | | PC0075268 | --- | --- |
| Sample Date | Client Info | | | 20 Apr 2023 | --- | --- |
| Machine Age | kms | Client Info | | 33097 | --- | --- |
| Oil Age | kms | Client Info | | 0 | --- | --- |
| Oil Changed | Client Info | | | Changed | --- | --- |
| Sample Status | | | | NORMAL | --- | --- |

| CONTAMINATION | | method | limit/base | current | history1 | history2 |
|---------------|-----------|--------|------------|----------------|----------|----------|
| Fuel | WC Method | | >3.0 | <1.0 | --- | --- |
| Glycol | WC Method | | | NEG | --- | --- |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|-------------|-----|---------------|------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185(m) | >90 | 43 | --- | --- |
| Chromium | ppm | ASTM D5185(m) | >20 | <1 | --- | --- |
| Nickel | ppm | ASTM D5185(m) | >2 | <1 | --- | --- |
| Titanium | ppm | ASTM D5185(m) | >2 | 0 | --- | --- |
| Silver | ppm | ASTM D5185(m) | >2 | <1 | --- | --- |
| Aluminum | ppm | ASTM D5185(m) | >20 | 5 | --- | --- |
| Lead | ppm | ASTM D5185(m) | >40 | <1 | --- | --- |
| Copper | ppm | ASTM D5185(m) | >330 | 5 | --- | --- |
| Tin | ppm | ASTM D5185(m) | >15 | 0 | --- | --- |
| Antimony | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Vanadium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Beryllium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Cadmium | ppm | ASTM D5185(m) | | 0 | --- | --- |

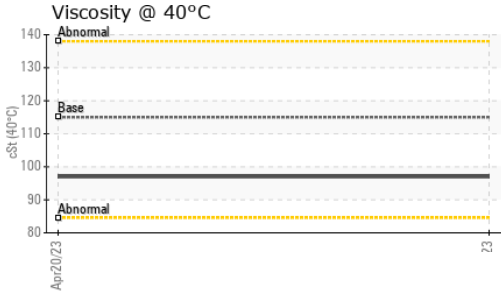
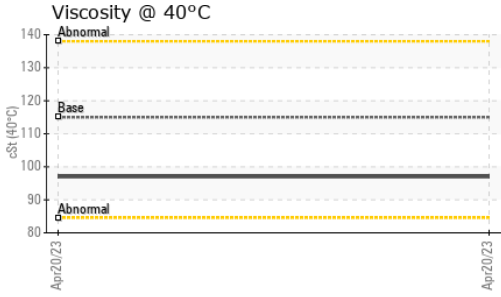
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|---------------|------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185(m) | 250 | 7 | --- | --- |
| Barium | ppm | ASTM D5185(m) | 10 | <1 | --- | --- |
| Molybdenum | ppm | ASTM D5185(m) | 100 | 60 | --- | --- |
| Manganese | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Magnesium | ppm | ASTM D5185(m) | 450 | 954 | --- | --- |
| Calcium | ppm | ASTM D5185(m) | 3000 | 1027 | --- | --- |
| Phosphorus | ppm | ASTM D5185(m) | 1150 | 993 | --- | --- |
| Zinc | ppm | ASTM D5185(m) | 1350 | 1188 | --- | --- |
| Sulfur | ppm | ASTM D5185(m) | 4250 | 2550 | --- | --- |
| Lithium | ppm | ASTM D5185(m) | | <1 | --- | --- |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|---------------|------------|----------|----------|----------|
| Silicon | ppm | ASTM D5185(m) | >25 | 4 | --- | --- |
| Sodium | ppm | ASTM D5185(m) | >158 | 2 | --- | --- |
| Potassium | ppm | ASTM D5185(m) | >20 | 0 | --- | --- |

| INFRA-RED | | method | limit/base | current | history1 | history2 |
|-----------|----------|-------------|------------|-------------|----------|----------|
| Soot % | % | ASTM D7844* | >6 | 0.2 | --- | --- |
| Nitration | Abs/cm | ASTM D7624* | >20 | 8.3 | --- | --- |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 20.4 | --- | --- |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|-------------|------------|-------------|----------|----------|
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 18.0 | --- | --- |

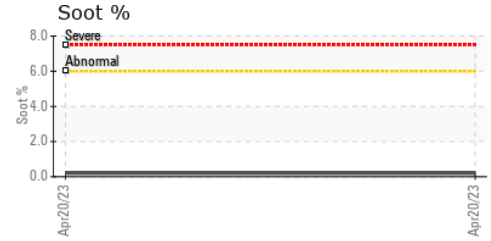
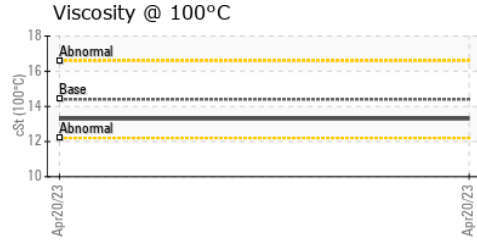
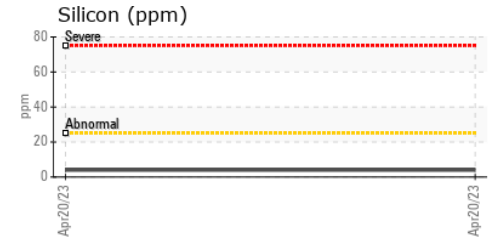
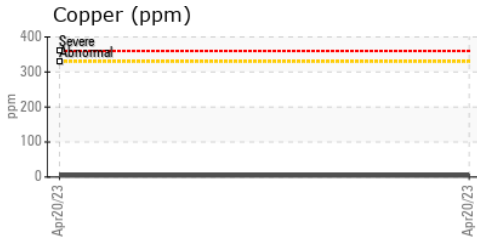
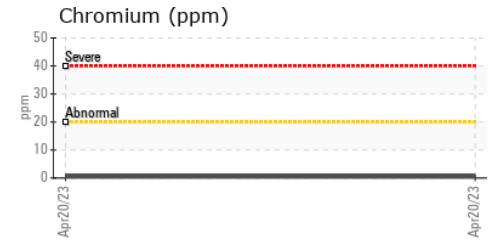
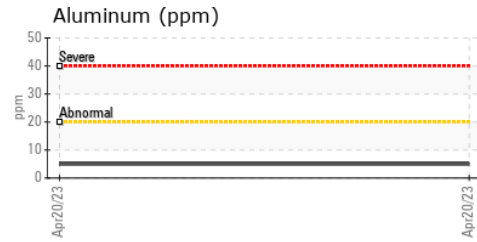
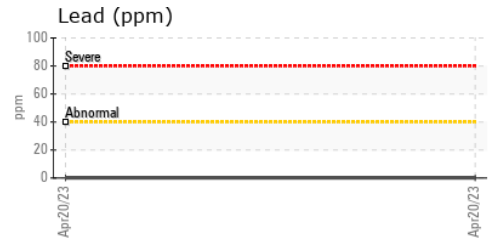
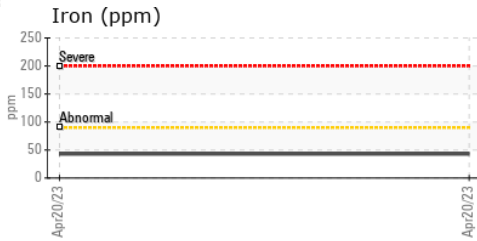
OIL ANALYSIS REPORT



| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | Visual* | NONE | --- | --- |
| Yellow Metal | scalar | Visual* | NONE | --- | --- |
| Precipitate | scalar | Visual* | NONE | --- | --- |
| Silt | scalar | Visual* | NONE | --- | --- |
| Debris | scalar | Visual* | NONE | --- | --- |
| Sand/Dirt | scalar | Visual* | NONE | --- | --- |
| Appearance | scalar | Visual* | NORML | --- | --- |
| Odor | scalar | Visual* | NORML | --- | --- |
| Emulsified Water | scalar | Visual* | >0.2 | --- | --- |
| Free Water | scalar | Visual* | NEG | --- | --- |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|----------------------|--------|---------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D7279(m) | 115 | 97.0 | --- |
| Visc @ 100°C | cSt | ASTM D7279(m) | 14.4 | 13.3 | --- |
| Viscosity Index (VI) | Scale | ASTM D2270* | 126 | 136 | --- |

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0075268 **Received** : 06 Nov 2023
Lab Number : 02594114 **Diagnosed** : 06 Nov 2023
Unique Number : 5671193 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

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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.