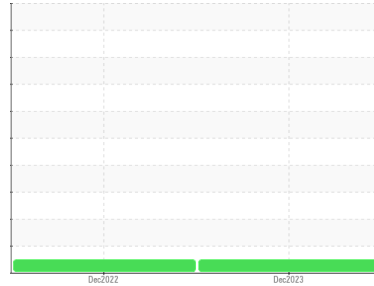




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id

**PK003**

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 |             | <b>WC0836734</b>   | WC0764004   | ---      |
| Sample Date   | Client Info |             | <b>05 Dec 2023</b> | 06 Dec 2022 | ---      |
| Machine Age   | hrs         | Client Info | <b>174</b>         | 158         | ---      |
| Oil Age       | hrs         | Client Info | <b>30</b>          | 15          | ---      |
| Oil Changed   | Client Info |             | <b>Not Chngd</b>   | Not Chngd   | ---      |
| Sample Status |             |             | <b>NORMAL</b>      | NORMAL      | ---      |

## CONTAMINATION

|       | method    | limit/base | current        | history1 | history2 |
|-------|-----------|------------|----------------|----------|----------|
| Fuel  | WC Method | >3.0       | <b>&lt;1.0</b> | <1.0     | ---      |
| Water | WC Method | >0.2       | <b>NEG</b>     | NEG      | ---      |

## WEAR METALS

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

## ADDITIVES

|            | method | limit/base    | current | history1     | history2 |     |
|------------|--------|---------------|---------|--------------|----------|-----|
| Boron      | ppm    | ASTM D5185(m) | 250     | <b>2</b>     | 3        | --- |
| Barium     | ppm    | ASTM D5185(m) | 10      | <b>0</b>     | 0        | --- |
| Molybdenum | ppm    | ASTM D5185(m) | 100     | <b>&lt;1</b> | 1        | --- |
| Manganese  | ppm    | ASTM D5185(m) |         | <b>0</b>     | 0        | --- |
| Magnesium  | ppm    | ASTM D5185(m) | 450     | <b>14</b>    | 13       | --- |
| Calcium    | ppm    | ASTM D5185(m) | 3000    | <b>2135</b>  | 2214     | --- |
| Phosphorus | ppm    | ASTM D5185(m) | 1150    | <b>838</b>   | 894      | --- |
| Zinc       | ppm    | ASTM D5185(m) | 1350    | <b>941</b>   | 949      | --- |
| Sulfur     | ppm    | ASTM D5185(m) | 4250    | <b>3153</b>  | 3044     | --- |
| Lithium    | ppm    | ASTM D5185(m) |         | <b>&lt;1</b> | <1       | --- |

## CONTAMINANTS

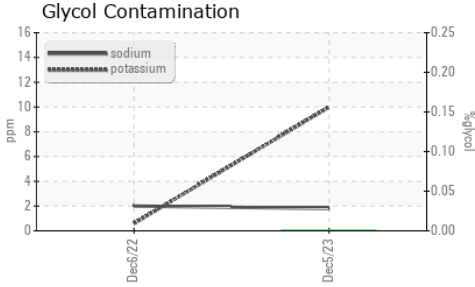
|           | method | limit/base    | current | history1   | history2 |     |
|-----------|--------|---------------|---------|------------|----------|-----|
| Silicon   | ppm    | ASTM D5185(m) | >25     | <b>1</b>   | 2        | --- |
| Sodium    | ppm    | ASTM D5185(m) | >158    | <b>2</b>   | 2        | --- |
| Potassium | ppm    | ASTM D5185(m) | >20     | <b>10</b>  | <1       | --- |
| Glycol    | %      | ASTM D7922*   |         | <b>0.0</b> | NEG      | --- |

## INFRA-RED

|           | method   | limit/base  | current | history1    | history2 |     |
|-----------|----------|-------------|---------|-------------|----------|-----|
| Soot %    | %        | ASTM D7844* | >6      | <b>0</b>    | 0        | --- |
| Nitration | Abs/cm   | ASTM D7624* | >20     | <b>5.7</b>  | 5.8      | --- |
| Sulfation | Abs/.1mm | ASTM D7415* | >30     | <b>15.3</b> | 16.4     | --- |



# OIL ANALYSIS REPORT

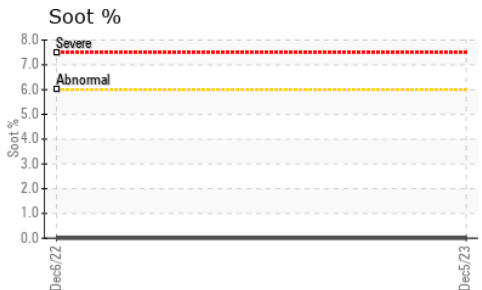
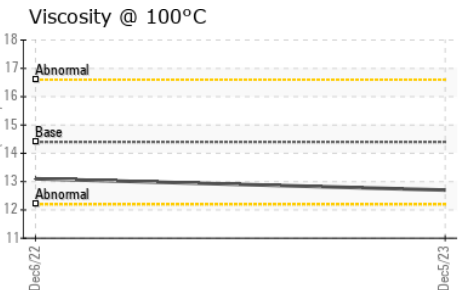
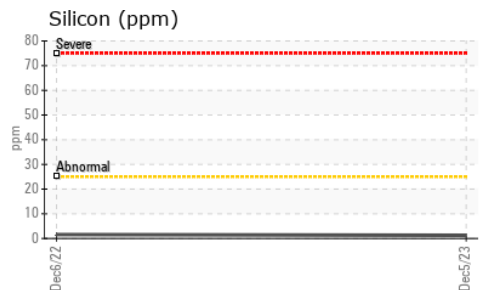
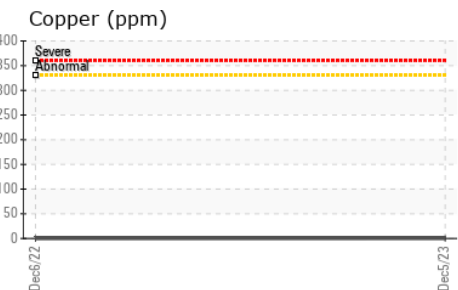
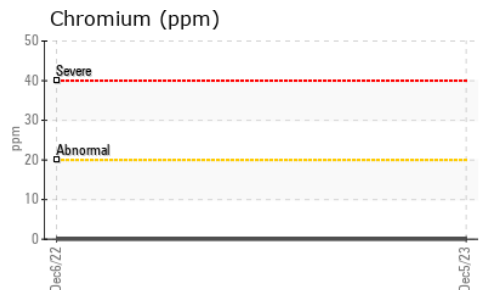
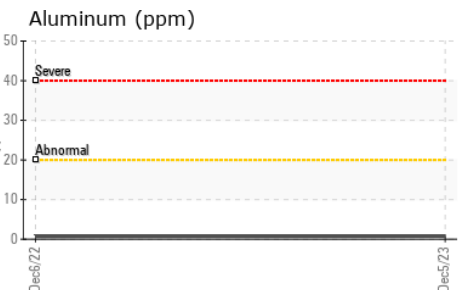
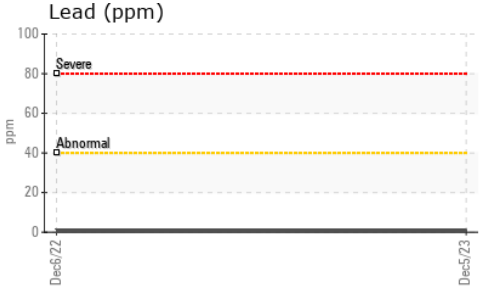
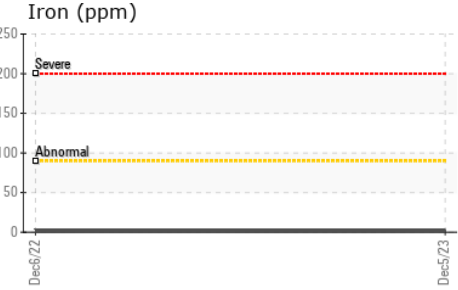
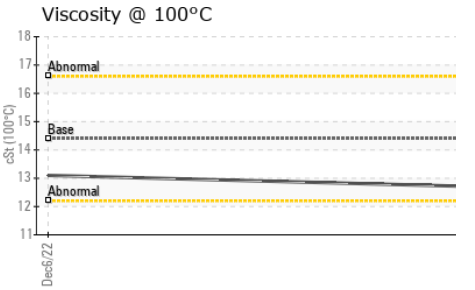


| FLUID DEGRADATION | method   | limit/base  | current | history1   | history2 |     |
|-------------------|----------|-------------|---------|------------|----------|-----|
| Oxidation         | Abs./1mm | ASTM D7414* | >25     | <b>8.8</b> | 9.2      | --- |

| VISUAL           | method | limit/base | current | history1   | history2 |     |
|------------------|--------|------------|---------|------------|----------|-----|
| Emulsified Water | scalar | Visual*    | >0.2    | <b>NEG</b> | NEG      | --- |
| Free Water       | scalar | Visual*    |         | <b>NEG</b> | NEG      | --- |

| FLUID PROPERTIES | method | limit/base    | current | history1    | history2 |     |
|------------------|--------|---------------|---------|-------------|----------|-----|
| Visc @ 100°C     | cSt    | ASTM D7279(m) | 14.4    | <b>12.7</b> | 13.1     | --- |

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0836734      **Received** : 05 Jan 2024  
**Lab Number** : **02606704**      **Diagnosed** : 05 Jan 2024  
**Unique Number** : 5707790      **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: Glycol )

**GENCARE SERVICES LTD.**  
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 T: (519)659-7118  
 F: (519)451-1707

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.