

# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**TOWN OF RIVERVIEW [6100196265]**  
Machine Id  
**F3A01186**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a new component breaking in.

### Contamination

Fuel content negligible. 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>WA0020655</b>   | ---      | ---      |
| Sample Date   | Client Info |             | <b>11 Oct 2023</b> | ---      | ---      |
| Machine Age   | hrs         | Client Info | <b>114</b>         | ---      | ---      |
| Oil Age       | hrs         | Client Info | <b>1</b>           | ---      | ---      |
| Oil Changed   | Client Info |             | <b>Changed</b>     | ---      | ---      |
| Sample Status |             |             | <b>NORMAL</b>      | ---      | ---      |

## CONTAMINATION

|        | method    | limit/base | current    | history1 | history2 |
|--------|-----------|------------|------------|----------|----------|
| Glycol | WC Method |            | <b>NEG</b> | ---      | ---      |

## WEAR METALS

|           | method | limit/base         | current      | history1 | history2 |
|-----------|--------|--------------------|--------------|----------|----------|
| Iron      | ppm    | ASTM D5185(m) >100 | <b>2</b>     | ---      | ---      |
| Chromium  | ppm    | ASTM D5185(m) >20  | <b>0</b>     | ---      | ---      |
| Nickel    | ppm    | ASTM D5185(m) >2   | <b>0</b>     | ---      | ---      |
| Titanium  | ppm    | ASTM D5185(m) >2   | <b>0</b>     | ---      | ---      |
| Silver    | ppm    | ASTM D5185(m) >2   | <b>&lt;1</b> | ---      | ---      |
| Aluminum  | ppm    | ASTM D5185(m) >25  | <b>&lt;1</b> | ---      | ---      |
| Lead      | ppm    | ASTM D5185(m) >40  | <b>1</b>     | ---      | ---      |
| Copper    | ppm    | ASTM D5185(m) >330 | <b>24</b>    | ---      | ---      |
| Tin       | ppm    | ASTM D5185(m) >15  | <b>0</b>     | ---      | ---      |
| Antimony  | ppm    | ASTM D5185(m)      | <b>0</b>     | ---      | ---      |
| Vanadium  | ppm    | ASTM D5185(m)      | <b>0</b>     | ---      | ---      |
| Beryllium | ppm    | ASTM D5185(m)      | <b>0</b>     | ---      | ---      |
| Cadmium   | ppm    | ASTM D5185(m)      | <b>0</b>     | ---      | ---      |

## ADDITIVES

|            | method | limit/base         | current      | history1 | history2 |
|------------|--------|--------------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185(m) 250  | <b>47</b>    | ---      | ---      |
| Barium     | ppm    | ASTM D5185(m) 10   | <b>&lt;1</b> | ---      | ---      |
| Molybdenum | ppm    | ASTM D5185(m) 100  | <b>42</b>    | ---      | ---      |
| Manganese  | ppm    | ASTM D5185(m)      | <b>0</b>     | ---      | ---      |
| Magnesium  | ppm    | ASTM D5185(m) 450  | <b>565</b>   | ---      | ---      |
| Calcium    | ppm    | ASTM D5185(m) 3000 | <b>1500</b>  | ---      | ---      |
| Phosphorus | ppm    | ASTM D5185(m) 1150 | <b>890</b>   | ---      | ---      |
| Zinc       | ppm    | ASTM D5185(m) 1350 | <b>1049</b>  | ---      | ---      |
| Sulfur     | ppm    | ASTM D5185(m) 4250 | <b>2373</b>  | ---      | ---      |
| Lithium    | ppm    | ASTM D5185(m)      | <b>&lt;1</b> | ---      | ---      |

## CONTAMINANTS

|           | method | limit/base         | current    | history1 | history2 |
|-----------|--------|--------------------|------------|----------|----------|
| Silicon   | ppm    | ASTM D5185(m) >25  | <b>10</b>  | ---      | ---      |
| Sodium    | ppm    | ASTM D5185(m) >158 | <b>2</b>   | ---      | ---      |
| Potassium | ppm    | ASTM D5185(m) >20  | <b>0</b>   | ---      | ---      |
| Fuel      | %      | ASTM D7593* >5     | <b>0.8</b> | ---      | ---      |

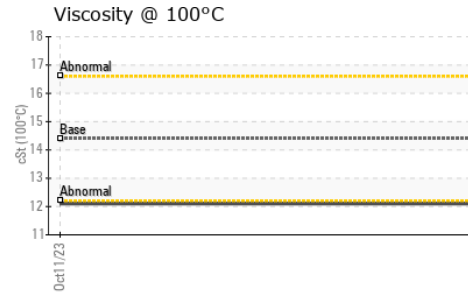
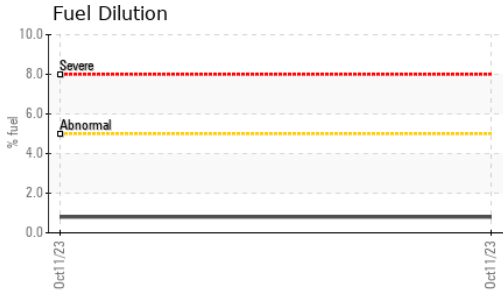
## INFRA-RED

|           | method   | limit/base      | current     | history1 | history2 |
|-----------|----------|-----------------|-------------|----------|----------|
| Soot %    | %        | ASTM D7844* >3  | <b>0</b>    | ---      | ---      |
| Nitration | Abs/cm   | ASTM D7624* >20 | <b>5.2</b>  | ---      | ---      |
| Sulfation | Abs/.1mm | ASTM D7415* >30 | <b>21.5</b> | ---      | ---      |

## FLUID DEGRADATION

|           | method   | limit/base      | current     | history1 | history2 |
|-----------|----------|-----------------|-------------|----------|----------|
| Oxidation | Abs/.1mm | ASTM D7414* >25 | <b>18.3</b> | ---      | ---      |

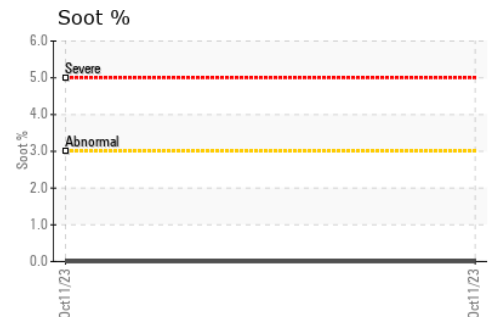
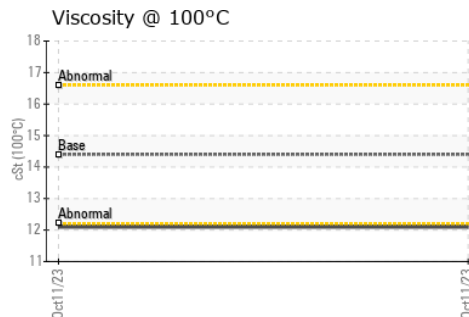
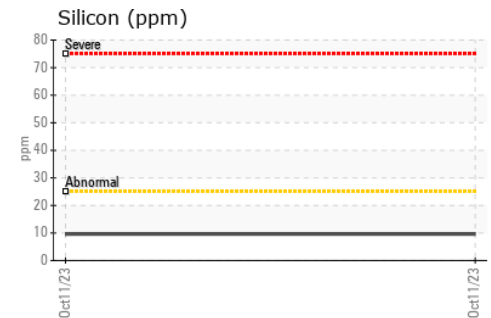
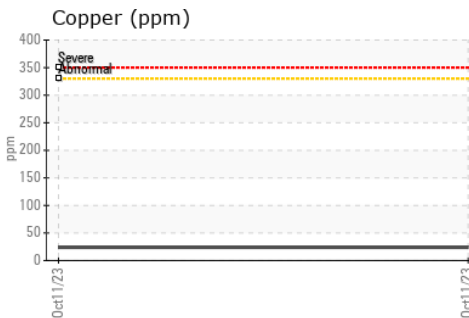
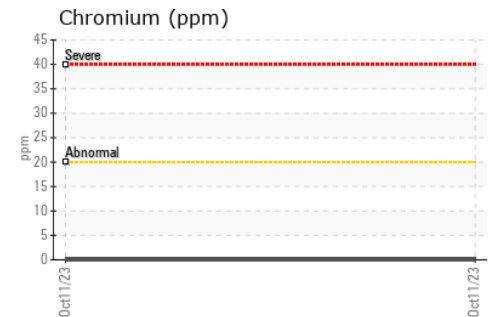
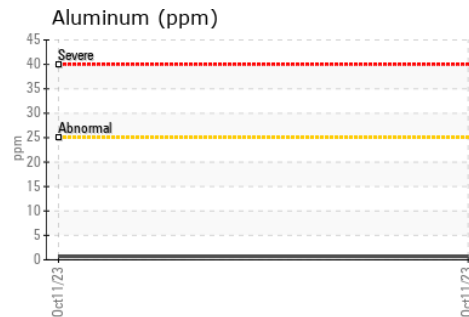
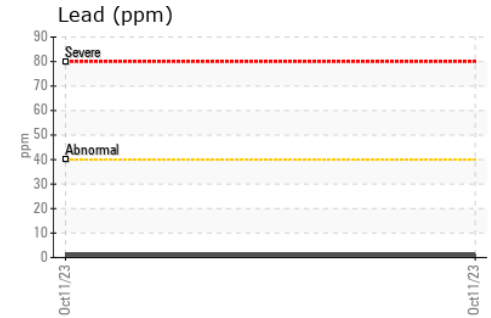
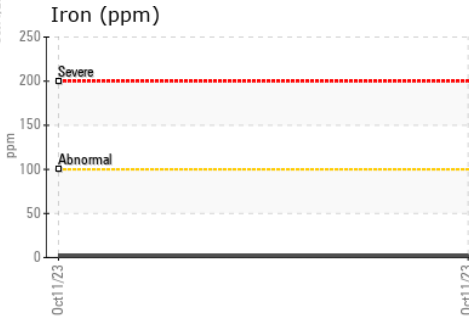
# OIL ANALYSIS REPORT



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

| FLUID PROPERTIES | method | limit/base    | current | history1 | history2 |
|------------------|--------|---------------|---------|----------|----------|
| Visc @ 100°C     | cSt    | ASTM D7279(m) | 14.4    | 12.1     | ---      |

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WA0020655 **Received** : 18 Oct 2023  
**Lab Number** : 02589958 **Diagnosed** : 19 Oct 2023  
**Unique Number** : 5659024 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel )

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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.