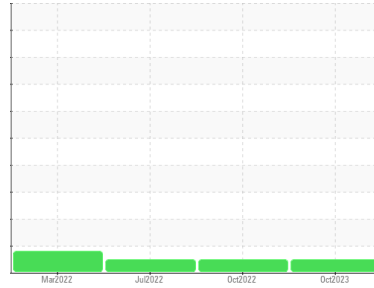




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**292002**

Component  
**Diesel Engine**

Fluid  
**DIESEL ENGINE OIL SAE 10W30 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### 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>WC0853367</b>   | WC0737942   | WC0553907   |
| Sample Date        | Client Info |             |            | <b>11 Oct 2023</b> | 13 Oct 2022 | 09 Jul 2022 |
| Machine Age        | kms         | Client Info |            | <b>343849</b>      | 282061      | 0           |
| Oil Age            | kms         | Client Info |            | <b>0</b>           | 0           | 0           |
| Oil Changed        | Client Info |             |            | <b>Changed</b>     | Changed     | N/A         |
| Sample Status      |             |             |            | <b>NORMAL</b>      | NORMAL      | NORMAL      |

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

| WEAR METALS |     | method        | limit/base | current      | history1 | history2 |
|-------------|-----|---------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185(m) | >90        | <b>15</b>    | 17       | 24       |
| Chromium    | ppm | ASTM D5185(m) | >20        | <b>&lt;1</b> | <1       | <1       |
| Nickel      | ppm | ASTM D5185(m) | >2         | <b>&lt;1</b> | <1       | <1       |
| Titanium    | ppm | ASTM D5185(m) | >2         | <b>0</b>     | <1       | <1       |
| Silver      | ppm | ASTM D5185(m) | >2         | <b>&lt;1</b> | 0        | 0        |
| Aluminum    | ppm | ASTM D5185(m) | >20        | <b>3</b>     | 5        | 6        |
| Lead        | ppm | ASTM D5185(m) | >40        | <b>&lt;1</b> | <1       | 0        |
| Copper      | ppm | ASTM D5185(m) | >330       | <b>1</b>     | 1        | 2        |
| Tin         | ppm | ASTM D5185(m) | >15        | <b>0</b>     | <1       | <1       |
| Antimony    | ppm | ASTM D5185(m) |            | <b>0</b>     | 0        | <1       |
| Vanadium    | ppm | ASTM D5185(m) |            | <b>0</b>     | 0        | 0        |
| Beryllium   | ppm | ASTM D5185(m) |            | <b>0</b>     | 0        | 0        |
| Cadmium     | ppm | ASTM D5185(m) |            | <b>0</b>     | 0        | 0        |

| ADDITIVES  |     | method        | limit/base | current      | history1 | history2 |
|------------|-----|---------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185(m) | 250        | <b>44</b>    | 49       | 37       |
| Barium     | ppm | ASTM D5185(m) | 10         | <b>&lt;1</b> | 0        | 0        |
| Molybdenum | ppm | ASTM D5185(m) | 100        | <b>&lt;1</b> | 16       | 19       |
| Manganese  | ppm | ASTM D5185(m) |            | <b>0</b>     | <1       | <1       |
| Magnesium  | ppm | ASTM D5185(m) | 450        | <b>705</b>   | 682      | 570      |
| Calcium    | ppm | ASTM D5185(m) | 3000       | <b>1299</b>  | 1393     | 1470     |
| Phosphorus | ppm | ASTM D5185(m) | 1150       | <b>636</b>   | 735      | 695      |
| Zinc       | ppm | ASTM D5185(m) | 1350       | <b>752</b>   | 763      | 788      |
| Sulfur     | ppm | ASTM D5185(m) | 4250       | <b>2442</b>  | 2516     | 2587     |
| Lithium    | ppm | ASTM D5185(m) |            | <b>&lt;1</b> | <1       | <1       |

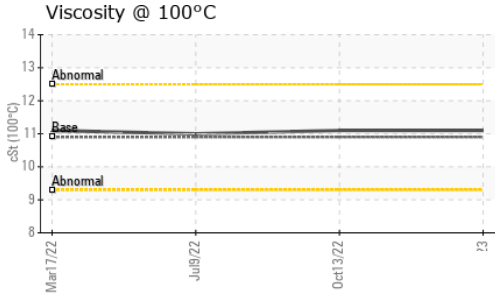
| CONTAMINANTS |     | method        | limit/base | current  | history1 | history2 |
|--------------|-----|---------------|------------|----------|----------|----------|
| Silicon      | ppm | ASTM D5185(m) | >25        | <b>5</b> | 5        | 4        |
| Sodium       | ppm | ASTM D5185(m) |            | <b>2</b> | 3        | 4        |
| Potassium    | ppm | ASTM D5185(m) | >20        | <b>4</b> | 6        | 20       |

| INFRA-RED |          | method      | limit/base | current     | history1 | history2 |
|-----------|----------|-------------|------------|-------------|----------|----------|
| Soot %    | %        | ASTM D7844* | >6         | <b>0.2</b>  | 0.1      | 0.2      |
| Nitration | Abs/cm   | ASTM D7624* | >20        | <b>10.3</b> | 10.4     | 11.2     |
| Sulfation | Abs/.1mm | ASTM D7415* | >30        | <b>21.0</b> | 22.2     | 23.8     |

| FLUID DEGRADATION |          | method      | limit/base | current     | history1 | history2 |
|-------------------|----------|-------------|------------|-------------|----------|----------|
| Oxidation         | Abs/.1mm | ASTM D7414* | >25        | <b>16.9</b> | 19.3     | 20.9     |



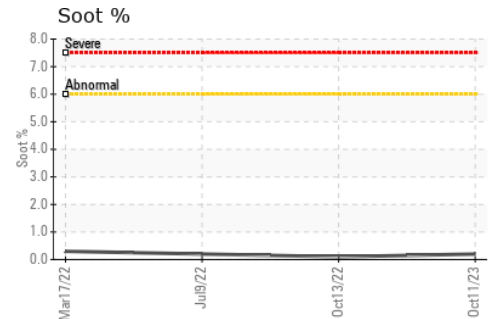
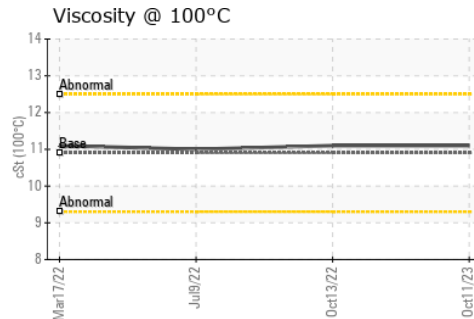
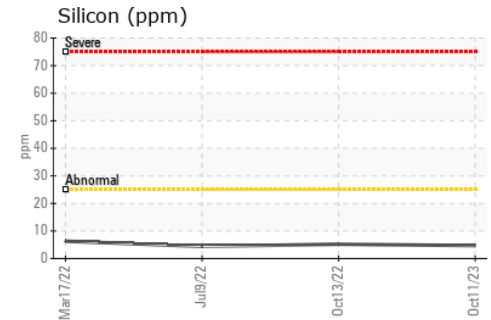
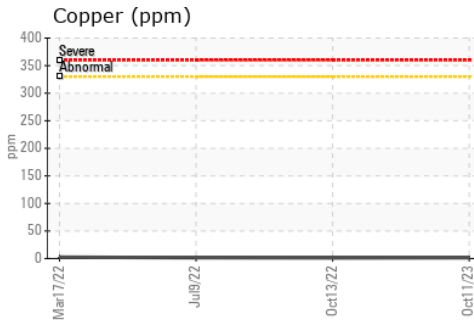
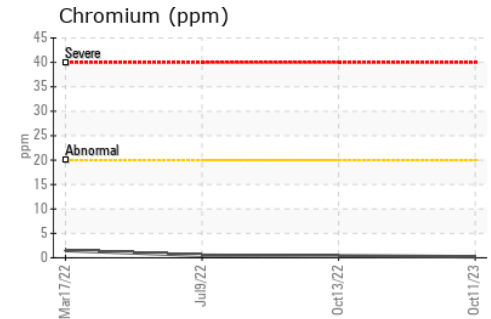
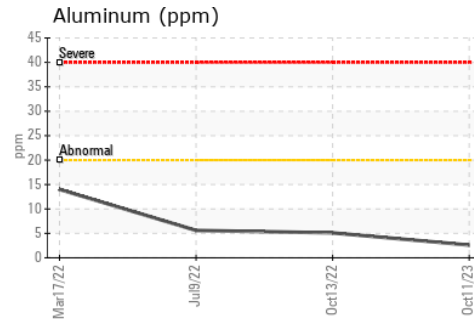
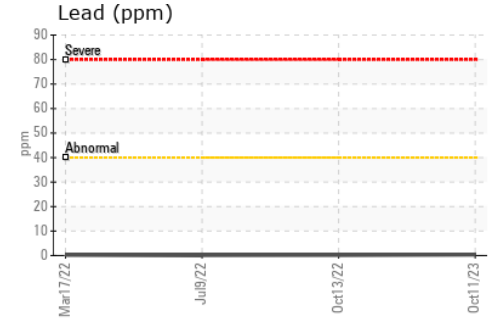
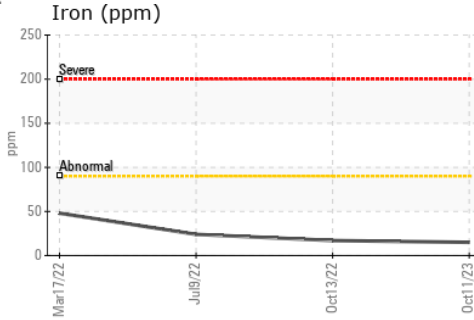
# OIL ANALYSIS REPORT



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

| FLUID PROPERTIES | method | limit/base    | current | history1 | history2 |
|------------------|--------|---------------|---------|----------|----------|
| Visc @ 100°C     | cSt    | ASTM D7279(m) | 10.9    | 11.1     | 11.0     |

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0853367 **Received** : 17 Oct 2023  
**Lab Number** : 02589526 **Diagnosed** : 17 Oct 2023  
**Unique Number** : 5658592 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1

**Rush Truck Centres**  
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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.