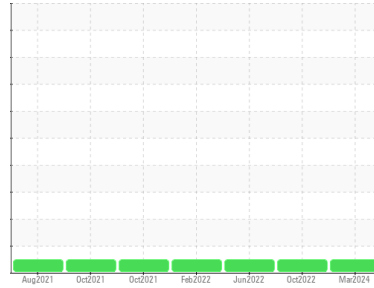




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**291935**

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>WC0853469</b>   | WC0738004   | WC0703048   |
| Sample Date        | Client Info |             |            | <b>06 Mar 2024</b> | 08 Oct 2022 | 18 Jun 2022 |
| Machine Age        | kms         | Client Info |            | <b>346583</b>      | 252163      | 233443      |
| Oil Age            | kms         | Client Info |            | <b>0</b>           | 0           | 0           |
| Oil Changed        | Client Info |             |            | <b>Changed</b>     | Changed     | Changed     |
| 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     |
| Water         | WC Method | >0.2   |            | <b>NEG</b>     | NEG      | NEG      |
| Glycol        | WC Method |        |            | <b>NEG</b>     | NEG      | NEG      |

| WEAR METALS |     | method        | limit/base | current      | history1 | history2 |
|-------------|-----|---------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185(m) | >90        | <b>20</b>    | 17       | 23       |
| Chromium    | ppm | ASTM D5185(m) | >20        | <b>&lt;1</b> | <1       | <1       |
| Nickel      | ppm | ASTM D5185(m) | >2         | <b>1</b>     | <1       | <1       |
| Titanium    | ppm | ASTM D5185(m) | >2         | <b>0</b>     | <1       | 0        |
| Silver      | ppm | ASTM D5185(m) | >2         | <b>0</b>     | 0        | <1       |
| Aluminum    | ppm | ASTM D5185(m) | >20        | <b>4</b>     | 5        | 8        |
| Lead        | ppm | ASTM D5185(m) | >40        | <b>0</b>     | 0        | 0        |
| Copper      | ppm | ASTM D5185(m) | >330       | <b>2</b>     | 1        | 1        |
| Tin         | ppm | ASTM D5185(m) | >15        | <b>0</b>     | 0        | <1       |
| Antimony    | ppm | ASTM D5185(m) |            | <b>0</b>     | <1       | 0        |
| 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        |

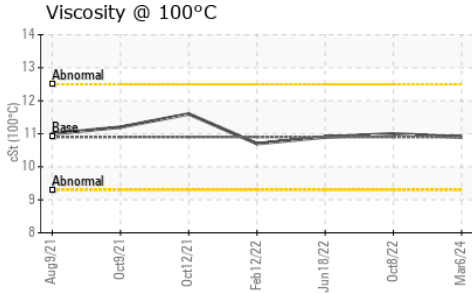
| ADDITIVES  |     | method        | limit/base | current      | history1 | history2 |
|------------|-----|---------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185(m) | 250        | <b>38</b>    | 33       | 37       |
| Barium     | ppm | ASTM D5185(m) | 10         | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm | ASTM D5185(m) | 100        | <b>1</b>     | 2        | 4        |
| Manganese  | ppm | ASTM D5185(m) |            | <b>0</b>     | <1       | <1       |
| Magnesium  | ppm | ASTM D5185(m) | 450        | <b>692</b>   | 680      | 713      |
| Calcium    | ppm | ASTM D5185(m) | 3000       | <b>1282</b>  | 1335     | 1342     |
| Phosphorus | ppm | ASTM D5185(m) | 1150       | <b>647</b>   | 679      | 695      |
| Zinc       | ppm | ASTM D5185(m) | 1350       | <b>750</b>   | 724      | 777      |
| Sulfur     | ppm | ASTM D5185(m) | 4250       | <b>2442</b>  | 2531     | 2528     |
| 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>6</b> | 7        | 7        |
| Sodium       | ppm | ASTM D5185(m) |            | <b>3</b> | 2        | 2        |
| Potassium    | ppm | ASTM D5185(m) | >20        | <b>8</b> | 6        | 12       |

| INFRA-RED |          | method      | limit/base | current     | history1 | history2 |
|-----------|----------|-------------|------------|-------------|----------|----------|
| Soot %    | %        | ASTM D7844* | >6         | <b>0.3</b>  | 0.1      | 0.1      |
| Nitration | Abs/cm   | ASTM D7624* | >20        | <b>10.9</b> | 10.3     | 10.9     |
| Sulfation | Abs./1mm | ASTM D7415* | >30        | <b>21.7</b> | 22.1     | 24.6     |



# OIL ANALYSIS REPORT



### FLUID DEGRADATION

| method   | limit/base  | current | history1 | history2 |      |
|----------|-------------|---------|----------|----------|------|
| Abs./1mm | ASTM D7414* | >25     | 17.9     | 18.7     | 19.9 |

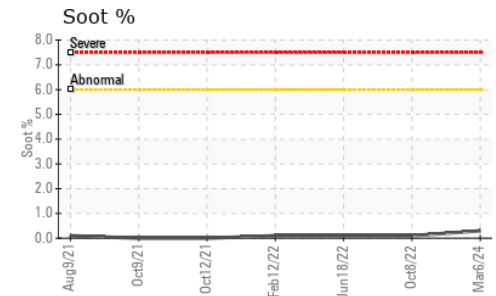
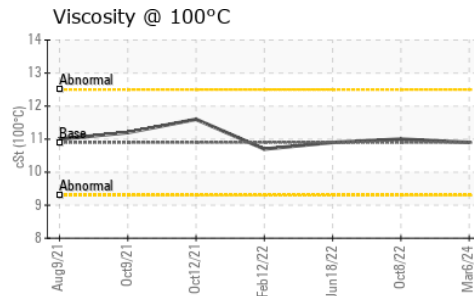
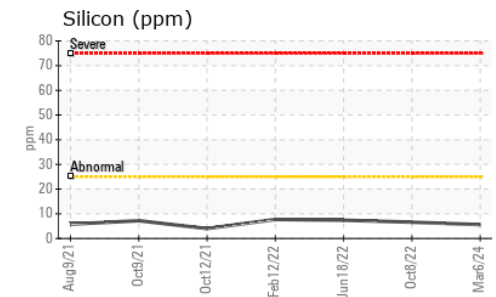
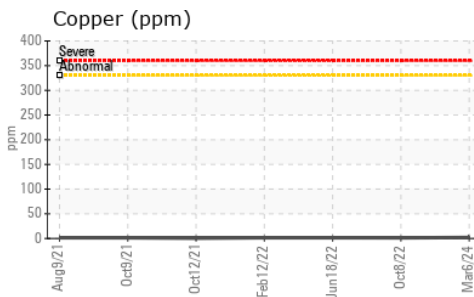
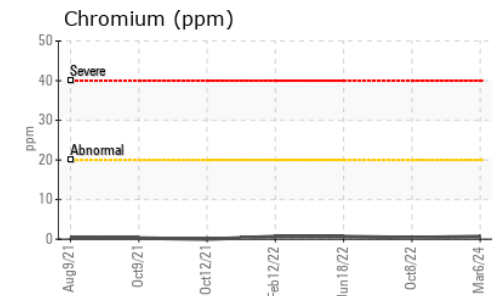
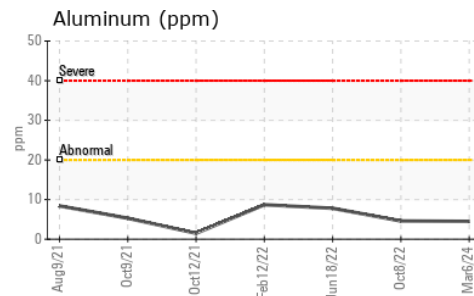
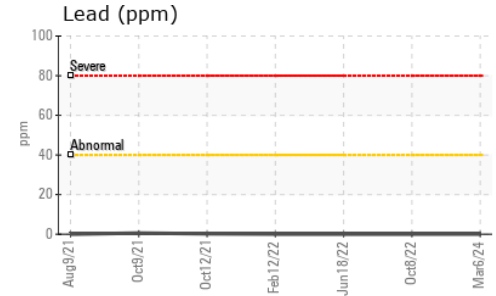
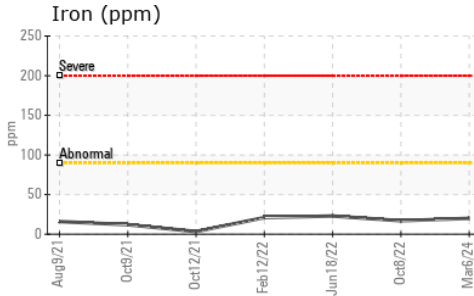
### VISUAL

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

### FLUID PROPERTIES

| method | limit/base    | current | history1 | history2 |
|--------|---------------|---------|----------|----------|
| cSt    | ASTM D7279(m) | 10.9    | 11.0     | 10.9     |

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0853469  
**Lab Number** : **02624542**  
**Unique Number** : 5749661  
**Test Package** : MOB 1  
**Received** : 26 Mar 2024  
**Tested** : 26 Mar 2024  
**Diagnosed** : 26 Mar 2024 - Wes Davis

**Rush Truck Centres**  
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 F:

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.