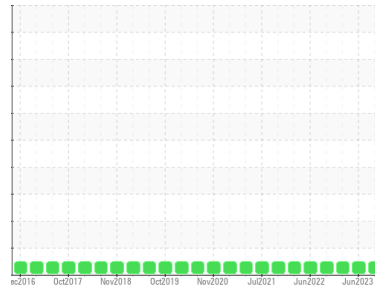




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**NOVA BUS 60069**  
 Component  
**Rear Diesel Engine**  
 Fluid  
**VALVOLINE 15W40 (24 LTR)**

## 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>WC0809120</b>   | WC0809110   | WC0770719   |
| Sample Date        | Client Info |             |            | <b>26 Oct 2023</b> | 05 Jun 2023 | 07 Feb 2023 |
| Machine Age        | kms         | Client Info |            | <b>488750</b>      | 466164      | 442541      |
| Oil Age            | kms         | Client Info |            | <b>10000</b>       | 10000       | 10000       |
| 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     |
| Glycol        | WC Method |        |            | <b>NEG</b>     | NEG      | NEG      |

| WEAR METALS |     | method        | limit/base | current      | history1 | history2 |
|-------------|-----|---------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185(m) | >75        | <b>19</b>    | 21       | 14       |
| Chromium    | ppm | ASTM D5185(m) | >5         | <b>&lt;1</b> | <1       | <1       |
| Nickel      | ppm | ASTM D5185(m) | >4         | <b>&lt;1</b> | <1       | 0        |
| 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) | >15        | <b>2</b>     | 2        | 2        |
| Lead        | ppm | ASTM D5185(m) | >25        | <b>&lt;1</b> | <1       | <1       |
| Copper      | ppm | ASTM D5185(m) | >100       | <b>5</b>     | 5        | 3        |
| Tin         | ppm | ASTM D5185(m) | >4         | <b>0</b>     | 0        | <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) | 39         | <b>2</b>     | 1        | 4        |
| Barium     | ppm | ASTM D5185(m) | 1          | <b>&lt;1</b> | 0        | 0        |
| Molybdenum | ppm | ASTM D5185(m) | 49         | <b>70</b>    | 61       | 57       |
| Manganese  | ppm | ASTM D5185(m) | 1          | <b>0</b>     | <1       | <1       |
| Magnesium  | ppm | ASTM D5185(m) | 616        | <b>1144</b>  | 967      | 899      |
| Calcium    | ppm | ASTM D5185(m) | 1554       | <b>1238</b>  | 1112     | 1251     |
| Phosphorus | ppm | ASTM D5185(m) | 899        | <b>1147</b>  | 1098     | 1133     |
| Zinc       | ppm | ASTM D5185(m) | 1069       | <b>1430</b>  | 1215     | 1239     |
| Sulfur     | ppm | ASTM D5185(m) | 2624       | <b>2790</b>  | 2495     | 2711     |
| Lithium    | ppm | ASTM D5185(m) |            | <b>&lt;1</b> | <1       | <1       |

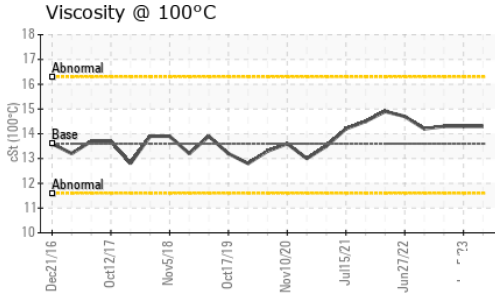
| CONTAMINANTS |     | method        | limit/base | current  | history1 | history2 |
|--------------|-----|---------------|------------|----------|----------|----------|
| Silicon      | ppm | ASTM D5185(m) | >25        | <b>6</b> | 4        | 4        |
| Sodium       | ppm | ASTM D5185(m) |            | <b>7</b> | 6        | 6        |
| Potassium    | ppm | ASTM D5185(m) | >20        | <b>0</b> | 0        | <1       |

| INFRA-RED |          | method      | limit/base | current     | history1 | history2 |
|-----------|----------|-------------|------------|-------------|----------|----------|
| Soot %    | %        | ASTM D7844* | >6         | <b>0.4</b>  | 0.4      | 0.2      |
| Nitration | Abs/cm   | ASTM D7624* | >20        | <b>9.4</b>  | 10.1     | 9.4      |
| Sulfation | Abs/.1mm | ASTM D7415* | >30        | <b>21.5</b> | 22.8     | 21.9     |

| FLUID DEGRADATION |          | method      | limit/base | current     | history1 | history2 |
|-------------------|----------|-------------|------------|-------------|----------|----------|
| Oxidation         | Abs/.1mm | ASTM D7414* | >25        | <b>19.0</b> | 21.0     | 17.7     |



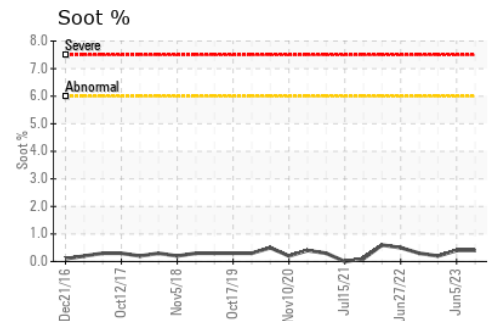
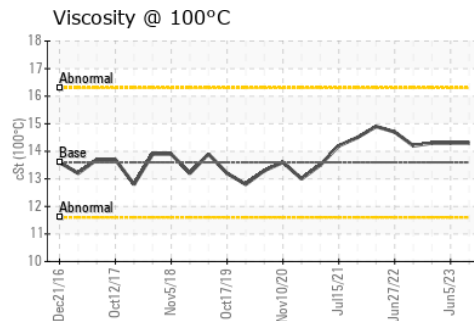
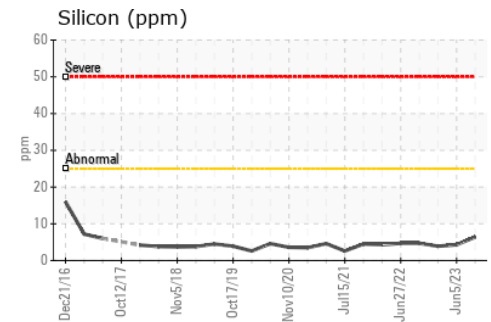
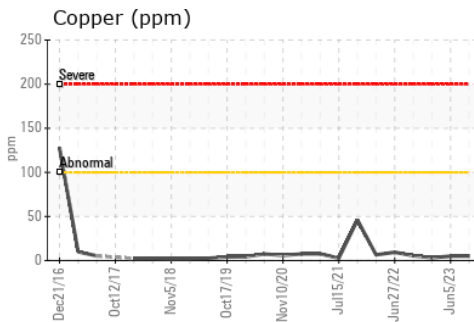
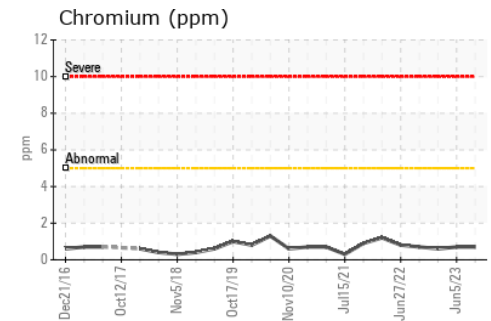
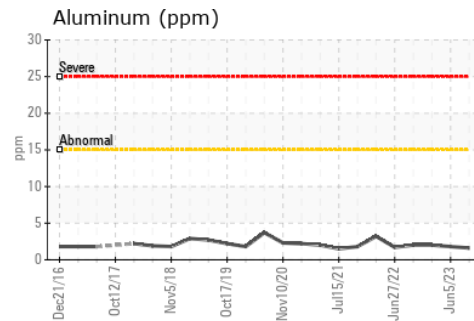
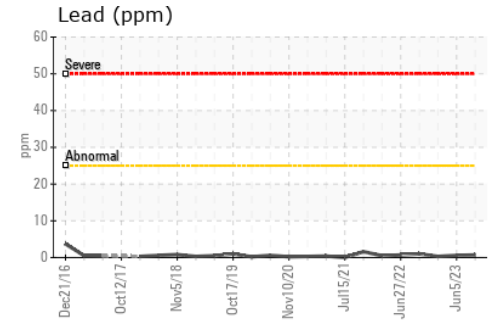
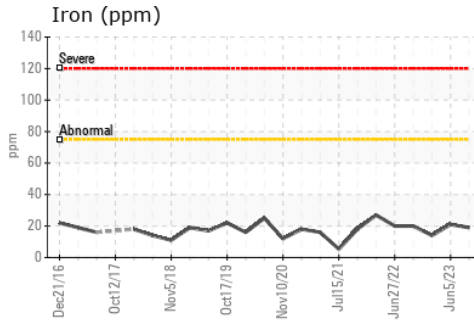
# OIL ANALYSIS REPORT



| 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) | 13.6    | <b>14.3</b> | 14.3     |

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0809120  
**Lab Number** : 02592882  
**Unique Number** : 5669961  
**Test Package** : MOB 1

**CITY OF PETERBOROUGH**  
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 T: (705)742-7777  
 F: (705)743-3223

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.