



# OIL ANALYSIS REPORT

|                 |        |
|-----------------|--------|
| WEAR            | NORMAL |
| CONTAMINATION   | NORMAL |
| FLUID CONDITION | NORMAL |

Machine Id  
**101 CONSUMERS**  
Component  
**Diesel Engine**  
Fluid  
**MOBIL DELVAC 1300 SUPER15W40 (--- GAL)**

## RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>WC0910621</b>   | WC0606362   | WC0483800   |
| Sample Date    |     | Client Info |           | <b>23 Mar 2024</b> | 11 Sep 2021 | 19 Sep 2020 |
| Machine Age    | hrs | Client Info |           | <b>0</b>           | 672         | 642         |
| Oil Age        | hrs | Client Info |           | <b>0</b>           | 0           | 0           |
| Filter Age     | hrs | Client Info |           | <b>0</b>           | 0           | 0           |
| Oil Changed    |     | Client Info |           | <b>N/A</b>         | Changed     | Changed     |
| Filter Changed |     | Client Info |           | <b>N/A</b>         | Changed     | Changed     |
| Sample Status  |     |             |           | <b>NORMAL</b>      | NORMAL      | NORMAL      |

## WEAR

All component wear rates are normal.

|          |     |               |      |              |    |    |
|----------|-----|---------------|------|--------------|----|----|
| Iron     | ppm | ASTM D5185(m) | >100 | <b>3</b>     | 2  | 2  |
| Chromium | ppm | ASTM D5185(m) | >20  | <b>&lt;1</b> | <1 | <1 |
| Nickel   | ppm | ASTM D5185(m) | >4   | <b>0</b>     | 0  | 0  |
| Titanium | ppm | ASTM D5185(m) |      | <b>0</b>     | 0  | <1 |
| Silver   | ppm | ASTM D5185(m) | >3   | <b>0</b>     | <1 | <1 |
| Aluminum | ppm | ASTM D5185(m) | >20  | <b>&lt;1</b> | <1 | <1 |
| Lead     | ppm | ASTM D5185(m) | >40  | <b>0</b>     | <1 | 0  |
| Copper   | ppm | ASTM D5185(m) | >330 | <b>&lt;1</b> | <1 | <1 |
| Tin      | ppm | ASTM D5185(m) | >15  | <b>0</b>     | <1 | 0  |
| Vanadium | ppm | ASTM D5185(m) |      | <b>0</b>     | 0  | 0  |

## CONTAMINATION

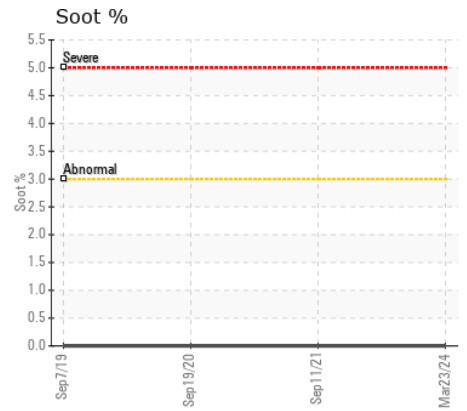
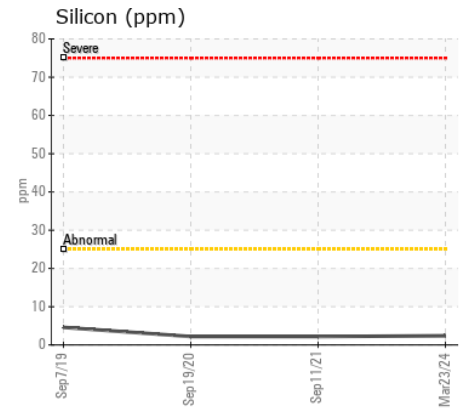
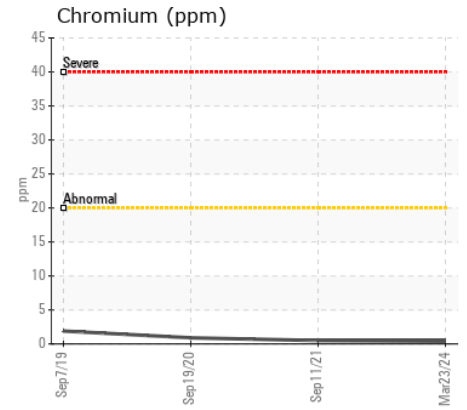
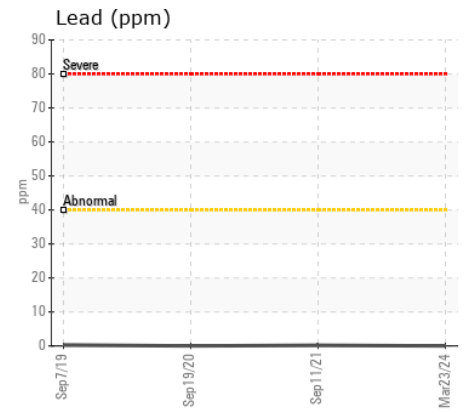
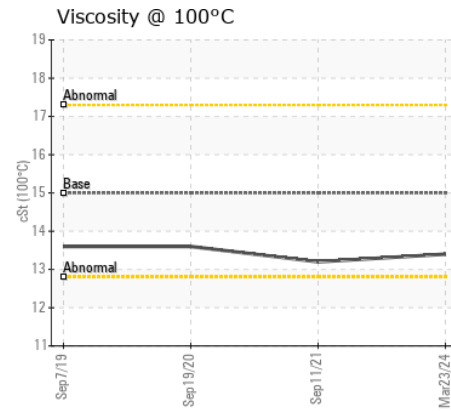
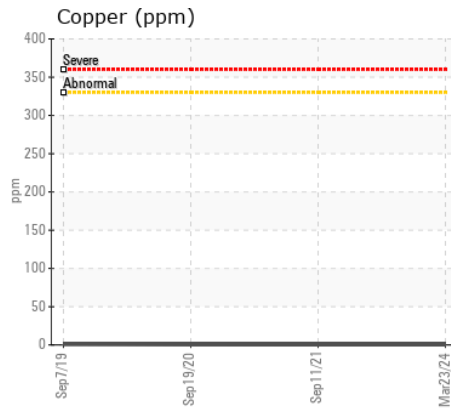
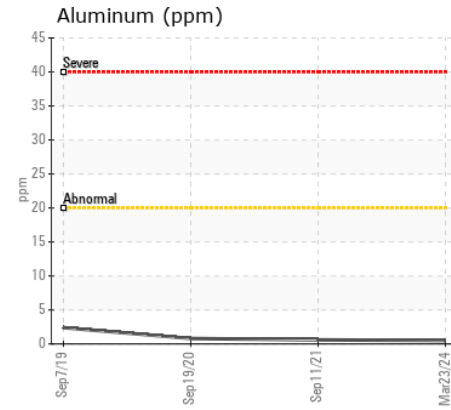
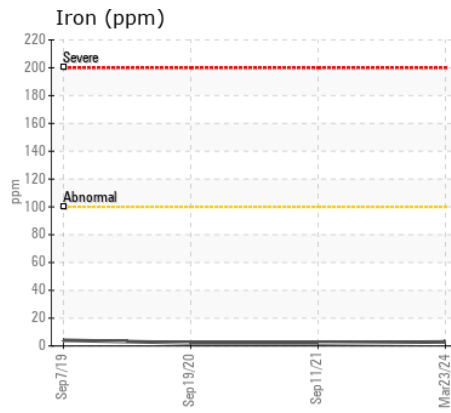
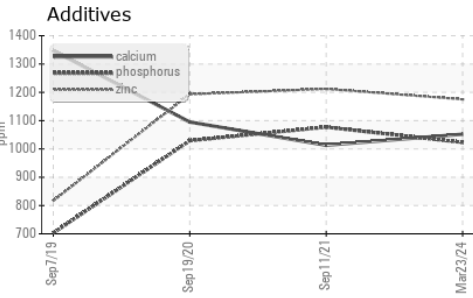
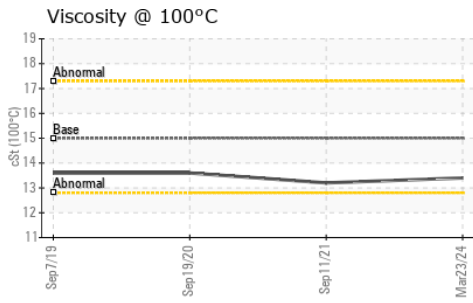
There is no indication of any contamination in the oil.

|                  |          |               |      |                |      |      |
|------------------|----------|---------------|------|----------------|------|------|
| Silicon          | ppm      | ASTM D5185(m) | >25  | <b>2</b>       | 2    | 2    |
| Potassium        | ppm      | ASTM D5185(m) | >20  | <b>0</b>       | <1   | <1   |
| Fuel             |          | WC Method     | >5   | <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  |
| Soot %           | %        | ASTM D7844*   | >3   | <b>0</b>       | 0    | 0    |
| Nitration        | Abs/cm   | ASTM D7624*   | >20  | <b>4.9</b>     | 5.1  | 4.8  |
| Sulfation        | Abs/.1mm | ASTM D7415*   | >30  | <b>18.9</b>    | 19.9 | 19.2 |
| Emulsified Water | scalar   | Visual*       | >0.2 | <b>NEG</b>     | NEG  | NEG  |

## FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

|              |          |               |      |             |      |      |
|--------------|----------|---------------|------|-------------|------|------|
| Sodium       | ppm      | ASTM D5185(m) |      | <b>1</b>    | 1    | <1   |
| Boron        | ppm      | ASTM D5185(m) | 0    | <b>1</b>    | 6    | 43   |
| Barium       | ppm      | ASTM D5185(m) | 0    | <b>0</b>    | 0    | <1   |
| Molybdenum   | ppm      | ASTM D5185(m) | 0    | <b>59</b>   | 59   | 68   |
| Manganese    | ppm      | ASTM D5185(m) |      | <b>0</b>    | <1   | <1   |
| Magnesium    | ppm      | ASTM D5185(m) | 0    | <b>997</b>  | 1014 | 956  |
| Calcium      | ppm      | ASTM D5185(m) |      | <b>1052</b> | 1013 | 1095 |
| Phosphorus   | ppm      | ASTM D5185(m) |      | <b>1023</b> | 1077 | 1029 |
| Zinc         | ppm      | ASTM D5185(m) |      | <b>1175</b> | 1212 | 1193 |
| Sulfur       | ppm      | ASTM D5185(m) |      | <b>2695</b> | 2789 | 2792 |
| Oxidation    | Abs/.1mm | ASTM D7414*   | >25  | <b>14.0</b> | 14.3 | 14.1 |
| Visc @ 100°C | cSt      | ASTM D7279(m) | 15.0 | <b>13.4</b> | 13.2 | 13.6 |



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0910621  
**Lab Number** : 02625609  
**Unique Number** : 5750728  
**Test Package** : MOB 1

**NORTHERN GENERATOR CO. LTD.**  
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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.