



# RAPPORT D'ANALYSE D'HUILE

|                |               |
|----------------|---------------|
| USURE          | <b>NORMAL</b> |
| CONTAMINATION  | <b>NORMAL</b> |
| ÉTAT DU FLUIDE | <b>NORMAL</b> |

Identité de la machine

**NAVISTAR 51947**

Composant

**Moteur diesel**

Fluide

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

## RECOMMENDATION

Resample at the next service interval to monitor.

| Test                | UOM | Method      | Limit/Abn | Current            | History1    | History2 |
|---------------------|-----|-------------|-----------|--------------------|-------------|----------|
| Numéro d'échant.    |     | Client Info |           | <b>WC0836025</b>   | WC0813016   | ---      |
| Date d'échant.      |     | Client Info |           | <b>10 Aug 2023</b> | 06 Jun 2023 | ---      |
| Âge d la Machine    | hrs | Client Info |           | <b>161719</b>      | 66883       | ---      |
| Âge de l'huile      | hrs | Client Info |           | <b>33218</b>       | 31938       | ---      |
| Âge du filtre       | hrs | Client Info |           | <b>33218</b>       | 31938       | ---      |
| Huile changée       |     | Client Info |           | <b>Changed</b>     | Changed     | ---      |
| Filtre changé       |     | Client Info |           | <b>Changed</b>     | Changed     | ---      |
| Statut de l'échant. |     |             |           | <b>NORMAL</b>      | NORMAL      | ---      |

## USURE

All component wear rates are normal.

|           |     |               |      |              |    |     |
|-----------|-----|---------------|------|--------------|----|-----|
| Fer       | ppm | ASTM D5185(m) | >90  | <b>19</b>    | 23 | --- |
| Chrome    | ppm | ASTM D5185(m) | >20  | <b>2</b>     | 2  | --- |
| Nickel    | ppm | ASTM D5185(m) | >2   | <b>1</b>     | <1 | --- |
| Titane    | ppm | ASTM D5185(m) | >2   | <b>0</b>     | 0  | --- |
| Argent    | ppm | ASTM D5185(m) | >2   | <b>&lt;1</b> | <1 | --- |
| Aluminium | ppm | ASTM D5185(m) | >20  | <b>20</b>    | 19 | --- |
| Plomb     | ppm | ASTM D5185(m) | >40  | <b>2</b>     | 2  | --- |
| Cuivre    | ppm | ASTM D5185(m) | >330 | <b>2</b>     | 5  | --- |
| Étain     | ppm | ASTM D5185(m) | >15  | <b>&lt;1</b> | 1  | --- |
| Vanadium  | ppm | ASTM D5185(m) |      | <b>0</b>     | 0  | --- |

## CONTAMINATION

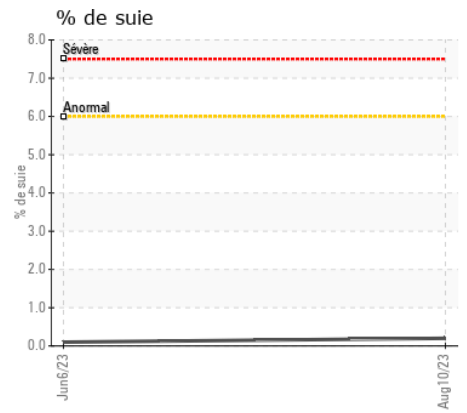
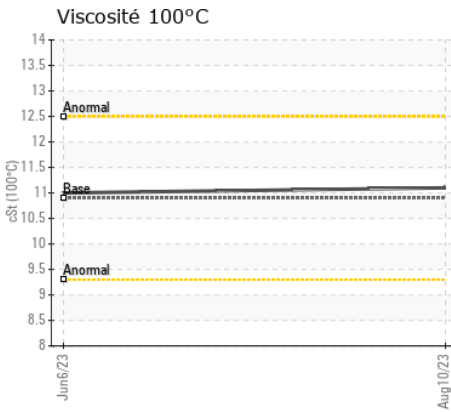
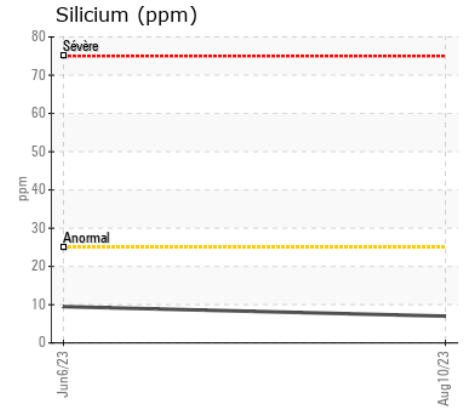
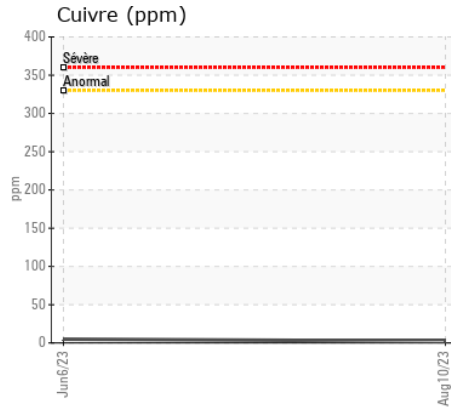
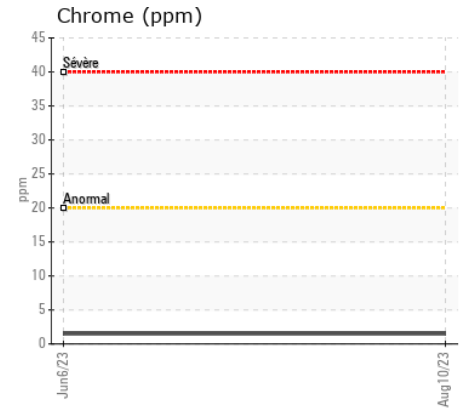
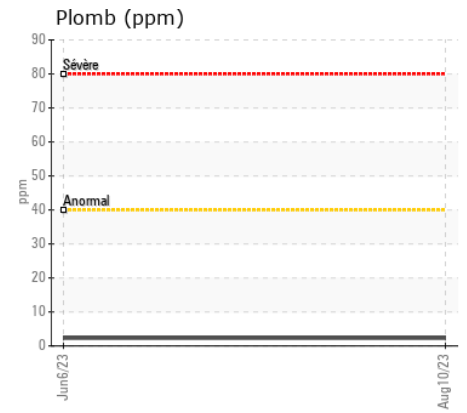
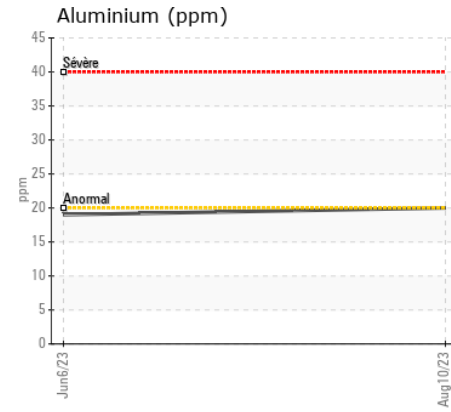
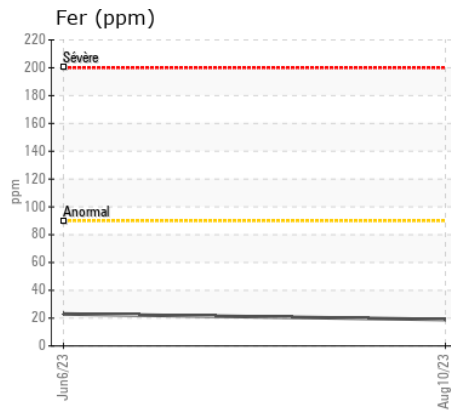
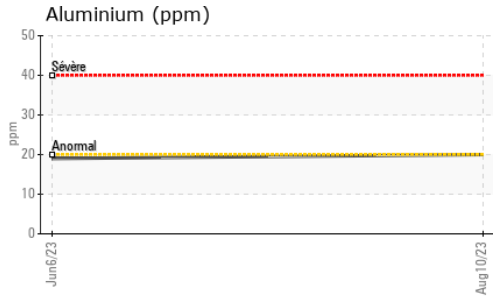
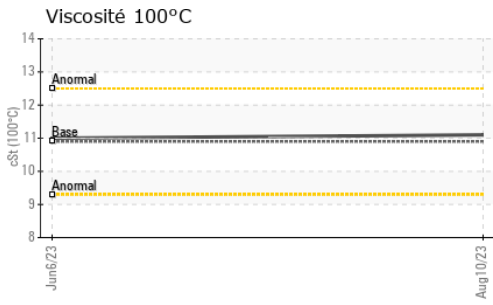
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

|                |          |               |      |                |      |     |
|----------------|----------|---------------|------|----------------|------|-----|
| Silicium       | ppm      | ASTM D5185(m) | >25  | <b>7</b>       | 10   | --- |
| Potassium      | ppm      | ASTM D5185(m) | >20  | <b>52</b>      | 47   | --- |
| Essence        |          | WC Method     | >3.0 | <b>&lt;1.0</b> | <1.0 | --- |
| Glycol         |          | WC Method     |      | <b>NEG</b>     | NEG  | --- |
| % de suie      | %        | ASTM D7844*   | >6   | <b>0.2</b>     | 0.1  | --- |
| Nitration      | Abs/cm   | ASTM D7624*   | >20  | <b>9.2</b>     | 8.7  | --- |
| Sulfatation    | Abs/.1mm | ASTM D7415*   | >30  | <b>20.9</b>    | 20.3 | --- |
| Eau émulsifiée | scalar   | Visual*       | >0.2 | <b>NEG</b>     | NEG  | --- |

## ÉTAT DU FLUIDE

The condition of the oil is acceptable for the time in service.

|            |          |               |      |              |      |     |
|------------|----------|---------------|------|--------------|------|-----|
| Sodium     | ppm      | ASTM D5185(m) |      | <b>2</b>     | 2    | --- |
| Bore       | ppm      | ASTM D5185(m) | 250  | <b>2</b>     | 9    | --- |
| Baryum     | ppm      | ASTM D5185(m) | 10   | <b>&lt;1</b> | <1   | --- |
| Molybdène  | ppm      | ASTM D5185(m) | 100  | <b>60</b>    | 61   | --- |
| Manganèse  | ppm      | ASTM D5185(m) |      | <b>0</b>     | 1    | --- |
| Magnésium  | ppm      | ASTM D5185(m) | 450  | <b>972</b>   | 951  | --- |
| Calcium    | ppm      | ASTM D5185(m) | 3000 | <b>1115</b>  | 1131 | --- |
| Phosphore  | ppm      | ASTM D5185(m) | 1150 | <b>1014</b>  | 1057 | --- |
| Zinc       | ppm      | ASTM D5185(m) | 1350 | <b>1233</b>  | 1215 | --- |
| Soufre     | ppm      | ASTM D5185(m) | 4250 | <b>2397</b>  | 2484 | --- |
| Oxydation  | Abs/.1mm | ASTM D7414*   | >25  | <b>17.0</b>  | 16.2 | --- |
| Visc 100°C | cSt      | ASTM D7279(m) | 10.9 | <b>11.1</b>  | 11.0 | --- |



**Laboratoire** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**N° d'échantillon** : WC0836025  
**N° de laboratoire** : 02589255  
**Numéro unique** : 5658321  
**Analyse** : MOB 1

**MANITOU LIN TRANSPORT**

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Pour discuter ce rapport, contacter le service à la clientèle au 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 La validez de los resultados y la interpretación se basan en la muestra y la información proporcionada.