



# RAPPORT D'ANALYSE D'HUILE

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

Identité de la machine

**NAVISTAR 52933**

Composant

**Moteur diesel**

Fluide

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

## RECOMMENDATION

Resample at the next service interval to monitor.

| Test                | UOM | Method      | Limit/Abn | Current            | History1    | History2 |
|---------------------|-----|-------------|-----------|--------------------|-------------|----------|
| Numéro d'échant.    |     | Client Info |           | <b>WC0836016</b>   | WC0813007   | ---      |
| Date d'échant.      |     | Client Info |           | <b>28 Jul 2023</b> | 10 May 2023 | ---      |
| Âge d la Machine    | mls | Client Info |           | <b>61102</b>       | 31640       | ---      |
| Âge de l'huile      | mls | Client Info |           | <b>29462</b>       | 31640       | ---      |
| Âge du filtre       | mls | Client Info |           | <b>29462</b>       | 31640       | ---      |
| 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

Metal levels are typical for a new component breaking in.

|           |     |               |      |              |    |     |
|-----------|-----|---------------|------|--------------|----|-----|
| Fer       | ppm | ASTM D5185(m) | >90  | <b>27</b>    | 48 | --- |
| Chrome    | ppm | ASTM D5185(m) | >20  | <b>2</b>     | 1  | --- |
| Nickel    | ppm | ASTM D5185(m) | >2   | <b>&lt;1</b> | <1 | --- |
| Titane    | ppm | ASTM D5185(m) | >2   | <b>0</b>     | <1 | --- |
| Argent    | ppm | ASTM D5185(m) | >2   | <b>&lt;1</b> | 1  | --- |
| Aluminium | ppm | ASTM D5185(m) | >20  | <b>41</b>    | 21 | --- |
| Plomb     | ppm | ASTM D5185(m) | >40  | <b>5</b>     | 5  | --- |
| Cuivre    | ppm | ASTM D5185(m) | >330 | <b>5</b>     | 19 | --- |
| Étain     | ppm | ASTM D5185(m) | >15  | <b>2</b>     | 4  | --- |
| Vanadium  | ppm | ASTM D5185(m) |      | <b>0</b>     | 0  | --- |

## CONTAMINATION

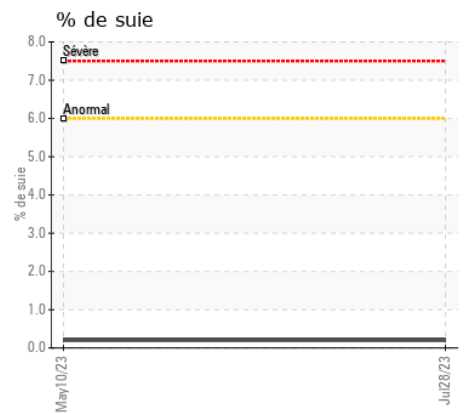
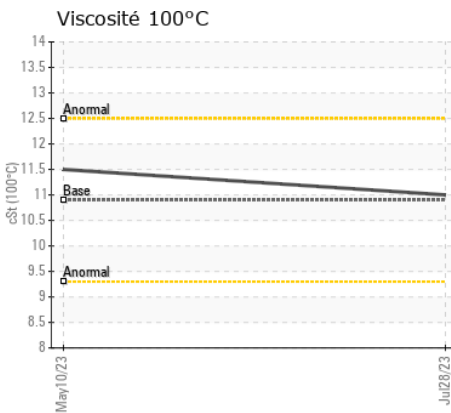
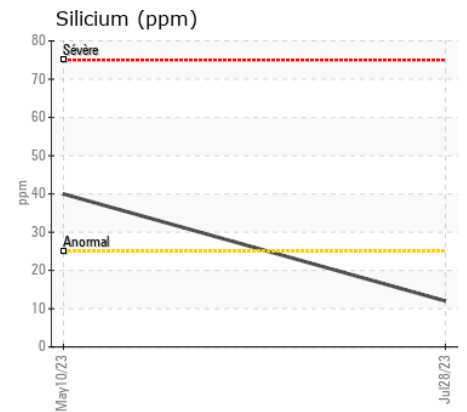
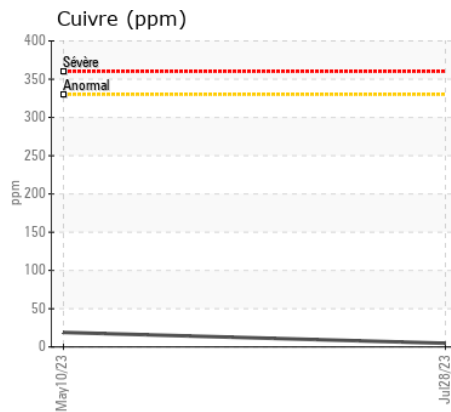
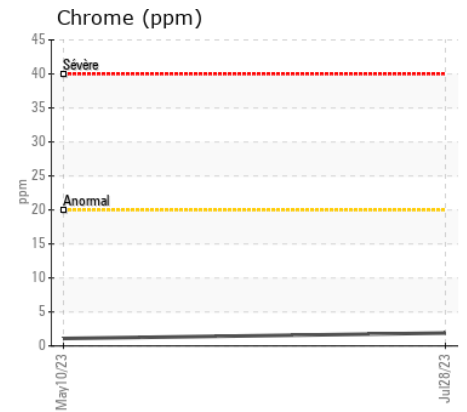
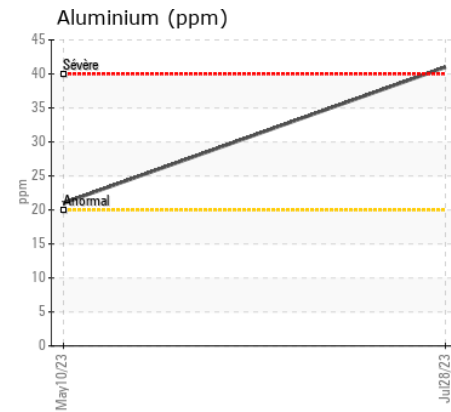
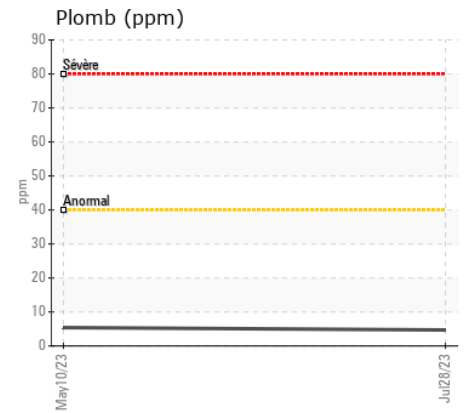
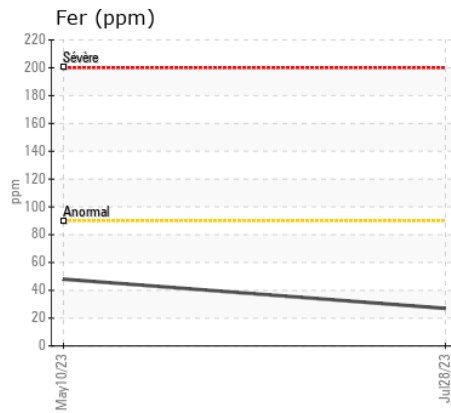
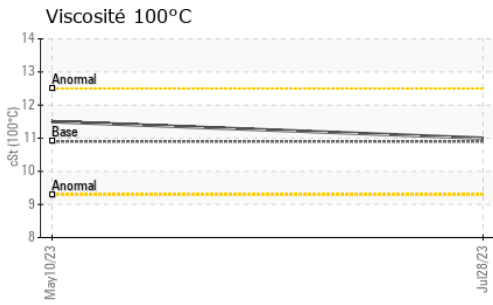
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

|                |          |               |      |                |      |     |
|----------------|----------|---------------|------|----------------|------|-----|
| Silicium       | ppm      | ASTM D5185(m) | >25  | <b>12</b>      | 40   | --- |
| Potassium      | ppm      | ASTM D5185(m) | >20  | <b>114</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>     | 0.2  | --- |
| Nitration      | Abs/cm   | ASTM D7624*   | >20  | <b>8.2</b>     | 9.0  | --- |
| Sulfatation    | Abs/.1mm | ASTM D7415*   | >30  | <b>20.3</b>    | 21.5 | --- |
| 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>     | 4    | --- |
| Bore       | ppm      | ASTM D5185(m) | 250  | <b>6</b>     | 46   | --- |
| Baryum     | ppm      | ASTM D5185(m) | 10   | <b>&lt;1</b> | 4    | --- |
| Molybdène  | ppm      | ASTM D5185(m) | 100  | <b>62</b>    | 62   | --- |
| Manganèse  | ppm      | ASTM D5185(m) |      | <b>1</b>     | 5    | --- |
| Magnésium  | ppm      | ASTM D5185(m) | 450  | <b>947</b>   | 453  | --- |
| Calcium    | ppm      | ASTM D5185(m) | 3000 | <b>1126</b>  | 1752 | --- |
| Phosphore  | ppm      | ASTM D5185(m) | 1150 | <b>1054</b>  | 1008 | --- |
| Zinc       | ppm      | ASTM D5185(m) | 1350 | <b>1219</b>  | 1175 | --- |
| Soufre     | ppm      | ASTM D5185(m) | 4250 | <b>2467</b>  | 2369 | --- |
| Oxydation  | Abs/.1mm | ASTM D7414*   | >25  | <b>14.7</b>  | 18.7 | --- |
| Visc 100°C | cSt      | ASTM D7279(m) | 10.9 | <b>11.0</b>  | 11.5 | --- |



**Laboratoire** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**N° d'échantillon** : WC0836016 **Reçu** : 31 Aug 2023  
**N° de laboratoire** : 02579604 **Diagnostiqué** : 31 Aug 2023  
**Numéro unique** : 5632664 **Diagnostiqueur** : Wes Davis  
**Analyse** : MOB 1

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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.