



# RAPPORT D'ANALYSE D'HUILE

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

Secteur

**3000 series**

Identité de la machine

**Navistar 3267**

Composant

**Moteur diesel**

Fluide

**PETRO CANADA DURON SHP 10W30 (26 LTR)**

## RECOMMENDATION

Resample at the next service interval to monitor.

| Test                | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|---------------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Numéro d'échant.    |     | Client Info |           | <b>WC0877557</b>   | WC0836008   | WC0787344   |
| Date d'échant.      |     | Client Info |           | <b>10 Nov 2023</b> | 18 Jul 2023 | 12 Jun 2023 |
| Âge d la Machine    | mls | Client Info |           | <b>479120</b>      | 21851       | 442222      |
| Âge de l'huile      | mls | Client Info |           | <b>15041</b>       | 21851       | 15317       |
| Âge du filtre       | mls | Client Info |           | <b>15041</b>       | 21851       | 15317       |
| Huile changée       |     | Client Info |           | <b>Changed</b>     | Changed     | Changed     |
| Filtre changé       |     | Client Info |           | <b>Changed</b>     | Changed     | Changed     |
| Statut de l'échant. |     |             |           | <b>NORMAL</b>      | NORMAL      | NORMAL      |

## USURE

All component wear rates are normal.

|             |        |               |      |              |     |     |
|-------------|--------|---------------|------|--------------|-----|-----|
| Fer         | ppm    | ASTM D5185(m) | >75  | <b>20</b>    | 29  | 18  |
| Chrome      | ppm    | ASTM D5185(m) | >5   | <b>&lt;1</b> | 1   | <1  |
| Nickel      | ppm    | ASTM D5185(m) | >4   | <b>&lt;1</b> | <1  | <1  |
| Titane      | ppm    | ASTM D5185(m) | >2   | <b>0</b>     | 0   | 0   |
| Argent      | ppm    | ASTM D5185(m) | >2   | <b>&lt;1</b> | <1  | <1  |
| Aluminium   | ppm    | ASTM D5185(m) | >15  | <b>4</b>     | 4   | 3   |
| Plomb       | ppm    | ASTM D5185(m) | >25  | <b>&lt;1</b> | 0   | 0   |
| Cuivre      | ppm    | ASTM D5185(m) | >100 | <b>1</b>     | 1   | 1   |
| Étain       | ppm    | ASTM D5185(m) | >4   | <b>0</b>     | 0   | 0   |
| Vanadium    | ppm    | ASTM D5185(m) |      | <b>0</b>     | 0   | 0   |
| Métal blanc | scalar | Visual*       | NONE | <b>NONE</b>  | --- | --- |
| Bronze      | scalar | Visual*       | NONE | <b>NONE</b>  | --- | --- |

## CONTAMINATION

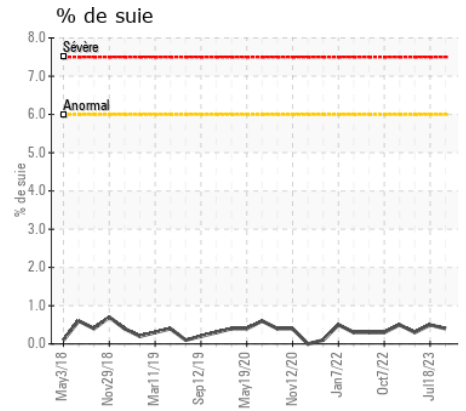
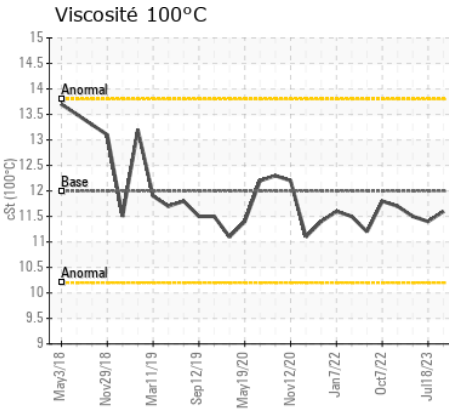
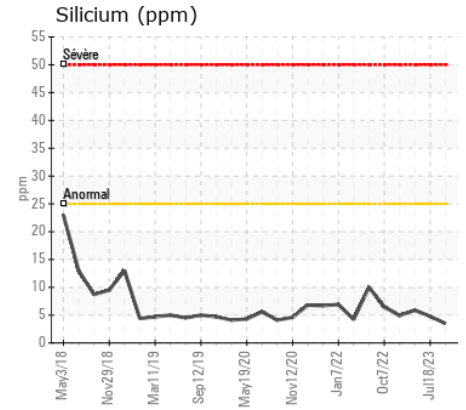
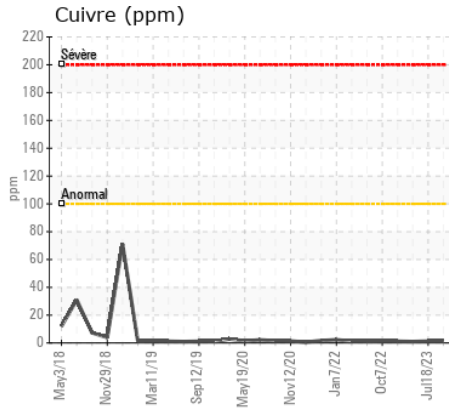
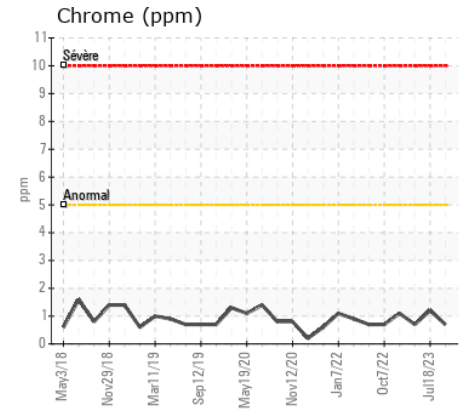
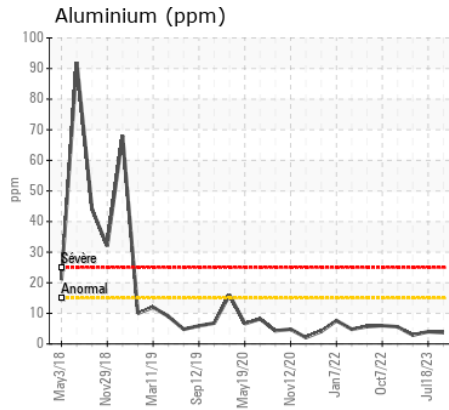
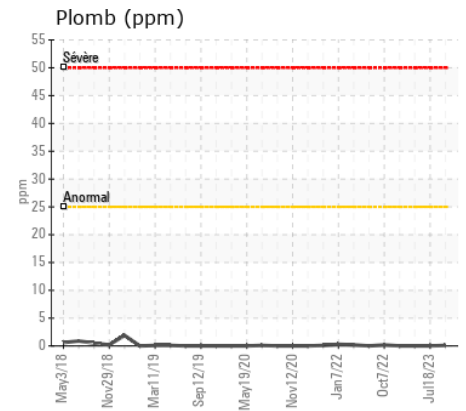
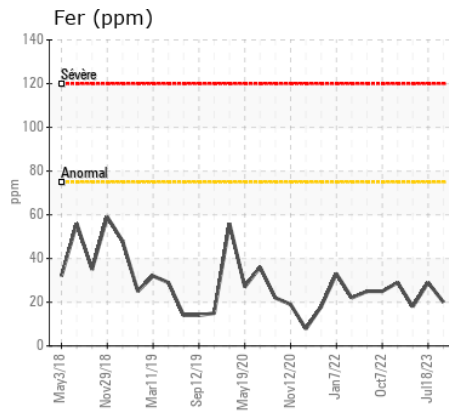
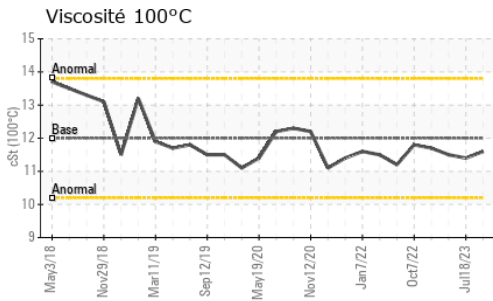
There is no indication of any contamination in the oil.

|                |          |               |       |                |       |       |
|----------------|----------|---------------|-------|----------------|-------|-------|
| Silicium       | ppm      | ASTM D5185(m) | >25   | <b>4</b>       | 5     | 6     |
| Potassium      | ppm      | ASTM D5185(m) | >20   | <b>2</b>       | 2     | 2     |
| Essence        |          | WC Method     | >3.0  | <b>&lt;1.0</b> | <1.0  | <1.0  |
| L'eau          |          | WC Method     | >0.2  | <b>NEG</b>     | NEG   | NEG   |
| Glycol         |          | WC Method     |       | <b>NEG</b>     | NEG   | NEG   |
| % de suie      | %        | ASTM D7844*   | >6    | <b>0.4</b>     | 0.5   | 0.3   |
| Nitration      | Abs/cm   | ASTM D7624*   | >20   | <b>10.6</b>    | 12.4  | 10.3  |
| Sulfatation    | Abs/.1mm | ASTM D7415*   | >30   | <b>20.8</b>    | 23.9  | 20.2  |
| Limon          | scalar   | Visual*       | NONE  | <b>NONE</b>    | ---   | ---   |
| Débris         | scalar   | Visual*       | NONE  | <b>NONE</b>    | ---   | ---   |
| Saleté         | scalar   | Visual*       | NONE  | <b>NONE</b>    | ---   | ---   |
| Apparence      | scalar   | Visual*       | NORML | <b>NORML</b>   | ---   | ---   |
| Odeur          | scalar   | Visual*       | NORML | <b>NORML</b>   | NORML | NORML |
| Eau émulsifiée | scalar   | Visual*       | >0.2  | <b>NEG</b>     | NEG   | 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    | 2    |
| Bore       | ppm      | ASTM D5185(m) | 2     | <b>2</b>    | 4    | 3    |
| Baryum     | ppm      | ASTM D5185(m) | 0     | <b>0</b>    | 0    | 0    |
| Molybdène  | ppm      | ASTM D5185(m) | 50    | <b>56</b>   | 61   | 61   |
| Manganèse  | ppm      | ASTM D5185(m) | 0     | <b>0</b>    | <1   | <1   |
| Magnésium  | ppm      | ASTM D5185(m) | 950   | <b>887</b>  | 988  | 997  |
| Calcium    | ppm      | ASTM D5185(m) | 1050  | <b>1011</b> | 1084 | 1100 |
| Phosphore  | ppm      | ASTM D5185(m) | 995   | <b>902</b>  | 1040 | 1085 |
| Zinc       | ppm      | ASTM D5185(m) | 1180  | <b>1128</b> | 1222 | 1234 |
| Soufre     | ppm      | ASTM D5185(m) | 2600  | <b>2410</b> | 2369 | 2550 |
| Oxydation  | Abs/.1mm | ASTM D7414*   | >25   | <b>17.1</b> | 19.8 | 17.5 |
| Visc 100°C | cSt      | ASTM D7279(m) | 12.00 | <b>11.6</b> | 11.4 | 11.5 |



ISO 17025:2017  
Accredited  
Laboratory

**Laboratoire** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**N° d'échantillon** : WC0877557  
**N° de laboratoire** : 02598746  
**Numéro unique** : 5683826  
**Analyse** : MOB 1 ( Additional Tests: Visual )

**Reçu** : 24 Nov 2023  
**Diagnostiqué** : 24 Nov 2023  
**Diagnostiqueur** : Wes Davis

**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.