



# LIEBHERR

## RAPPORT D'ANALYSE D'HUILE

USURE

**ANORMAL**

CONTAMINATION

**ATTENTION**

ÉTAT DU FLUIDE

**NORMAL**



Secteur

**(340290)**

Identité de la machine

**LIEBHERR L586 059132-1334**

Composant

**Système hydraulique**

Fluid

**PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL (100 LTR)**

### RECOMMANDATION

Nous vous recommandons de vidanger l'huile de ce composant si vous ne l'avez pas déjà fait. Nous recommandons le remplacement des filtres de ce composant. Confirmez la source du lubrifiant utilisé pour l'appoint/remplissage. Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation.

| Test                | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|---------------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Numéro d'échant.    |     | Client Info |           | <b>LH</b>          | LH          | LH          |
| Date d'échant.      |     | Client Info |           | <b>11 Feb 2024</b> | 10 Jan 2024 | 06 Nov 2023 |
| Âge d la Machine    | hrs | Client Info |           | <b>18500</b>       | 0           | 17000       |
| Âge de l'huile      | hrs | Client Info |           | <b>0</b>           | 0           | 0           |
| Âge du filtre       | hrs | Client Info |           | <b>0</b>           | 0           | 0           |
| Huile changée       |     | Client Info |           | <b>Not Changd</b>  | Not Changd  | Not Changd  |
| Filtre changé       |     | Client Info |           | <b>Not Changd</b>  | Changed     | Changed     |
| Statut de l'échant. |     |             |           | <b>ABNORMAL</b>    | NORMAL      | ABNORMAL    |

### USURE

Le taux de fer est anormal. Le bas indice ferreux (PQ) indique que l'usure ferreuse est due à de la corrosion.

|             |        |               |      |              |      |      |
|-------------|--------|---------------|------|--------------|------|------|
| PQ          |        | ASTM D8184*   | >50  | <b>0</b>     | ---  | ---  |
| Fer         | ppm    | ASTM D5185(m) | >50  | <b>▲ 55</b>  | 42   | 31   |
| Chrome      | ppm    | ASTM D5185(m) | >5   | <b>5</b>     | 5    | 4    |
| Nickel      | ppm    | ASTM D5185(m) | >2   | <b>&lt;1</b> | 0    | <1   |
| Titane      | ppm    | ASTM D5185(m) |      | <b>0</b>     | 0    | 0    |
| Argent      | ppm    | ASTM D5185(m) |      | <b>0</b>     | 0    | <1   |
| Aluminium   | ppm    | ASTM D5185(m) | >5   | <b>2</b>     | 1    | 1    |
| Plomb       | ppm    | ASTM D5185(m) | >15  | <b>1</b>     | <1   | <1   |
| Cuivre      | ppm    | ASTM D5185(m) | >10  | <b>2</b>     | 1    | 1    |
| Étain       | ppm    | ASTM D5185(m) | >2   | <b>0</b>     | <1   | 0    |
| Vanadium    | ppm    | ASTM D5185(m) |      | <b>0</b>     | 0    | 0    |
| Métal blanc | scalar | Visual*       | NONE | <b>NONE</b>  | NONE | NONE |
| Bronze      | scalar | Visual*       | NONE | <b>NONE</b>  | NONE | NONE |

### CONTAMINATION

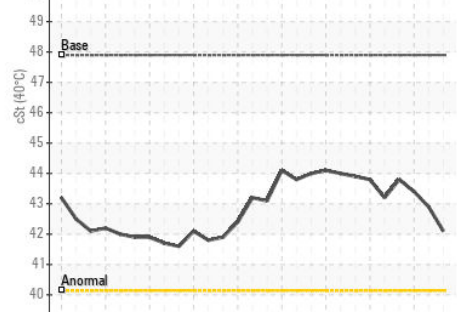
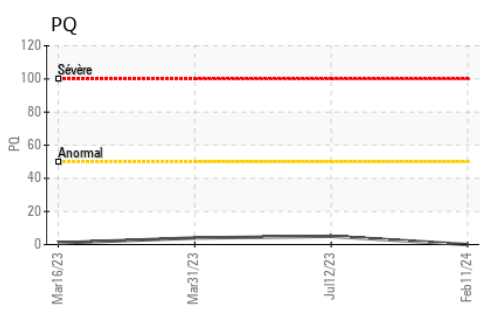
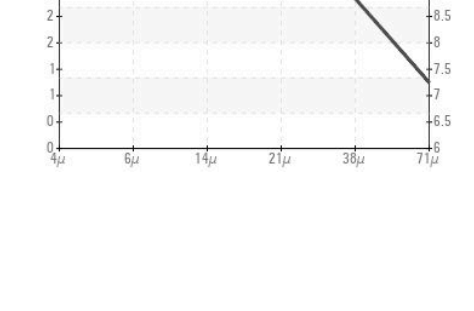
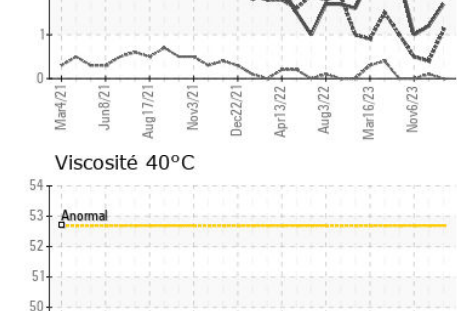
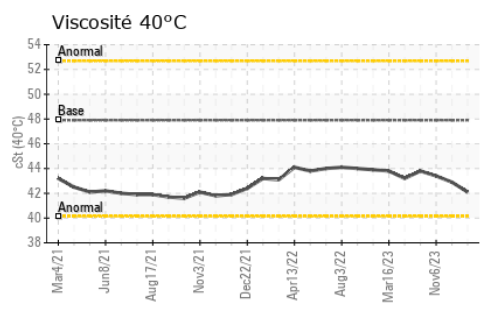
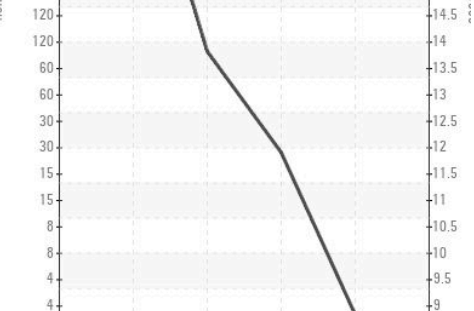
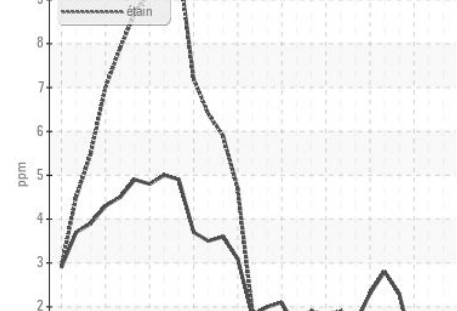
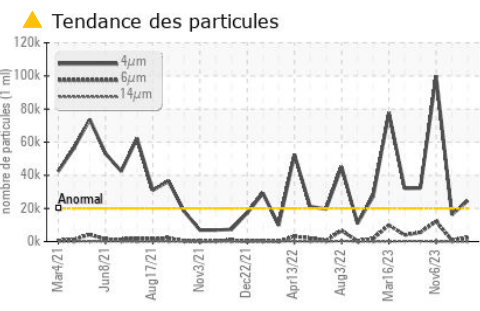
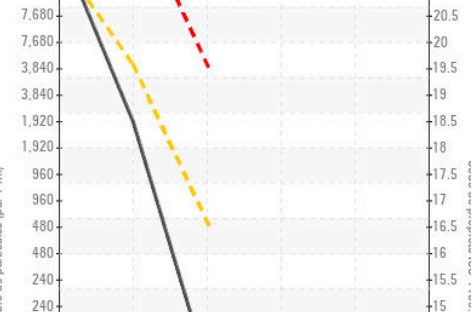
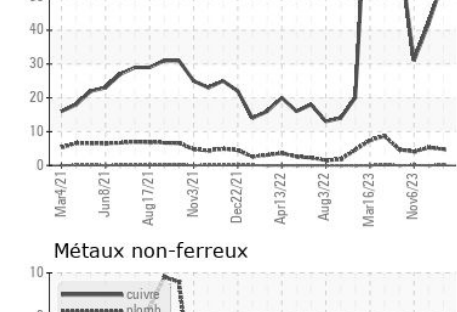
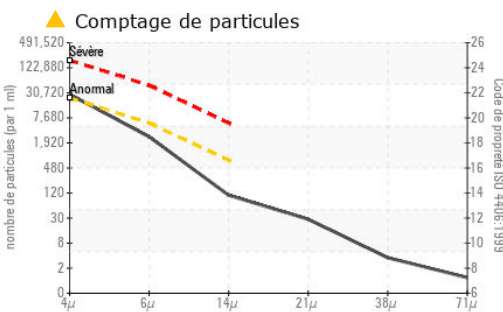
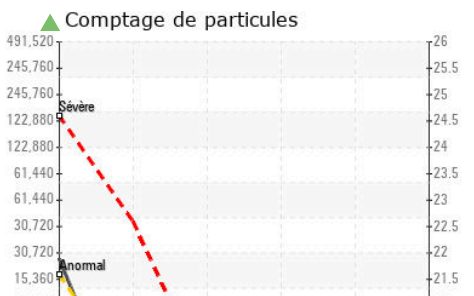
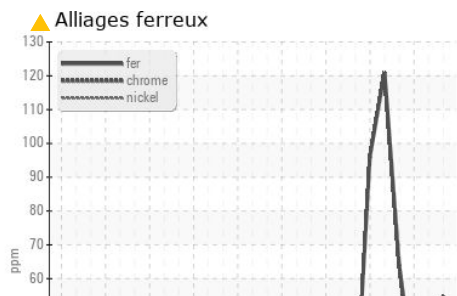
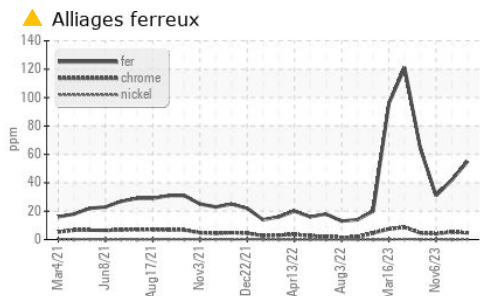
Il y a une légère quantité de limon (particules de 4 à 14 microns) dans l'huile.

|                     |        |               |           |                   |          |            |
|---------------------|--------|---------------|-----------|-------------------|----------|------------|
| Silicium            | ppm    | ASTM D5185(m) | >15       | <b>2</b>          | 3        | 3          |
| Potassium           | ppm    | ASTM D5185(m) | >20       | <b>3</b>          | 0        | 1          |
| L'eau               |        | WC Method     | >0.1      | <b>NEG</b>        | NEG      | NEG        |
| Particules >4µ      |        | ASTM D7647    | >20000    | <b>▲ 24567</b>    | 16272    | ▲ 99966    |
| Particules >6µ      |        | ASTM D7647    | >5000     | <b>2357</b>       | 901      | ▲ 12120    |
| Particules >14µ     |        | ASTM D7647    | >640      | <b>94</b>         | 66       | 7          |
| Particules >21µ     |        | ASTM D7647    | >160      | <b>25</b>         | 19       | 2          |
| Particules >38µ     |        | ASTM D7647    | >40       | <b>3</b>          | 1        | 0          |
| Particules >71µ     |        | ASTM D7647    | >10       | <b>1</b>          | 0        | 0          |
| Propreté de l'huile |        | ISO 4406 (c)  | >21/19/16 | <b>▲ 22/18/14</b> | 21/17/13 | ▲ 24/21/10 |
| Limon               | scalar | Visual*       | NONE      | <b>NONE</b>       | NONE     | NONE       |
| Débris              | scalar | Visual*       | NONE      | <b>NONE</b>       | VLITE    | NONE       |
| Saleté              | scalar | Visual*       | NONE      | <b>NONE</b>       | NONE     | NONE       |
| Apparence           | scalar | Visual*       | NORML     | <b>NORML</b>      | NORML    | NORML      |
| Odeur               | scalar | Visual*       | NORML     | <b>NORML</b>      | NORML    | NORML      |
| Eau émulsifiée      | scalar | Visual*       | >0.1      | <b>NEG</b>        | NEG      | NEG        |

### ÉTAT DU FLUIDE

Les niveaux d'additifs indiquent l'ajout d'une autre marque ou d'un autre type d'huile. L'huile n'est plus en état de service en raison d'une usure anormale et/ou sévère.

|           |     |               |      |              |      |      |
|-----------|-----|---------------|------|--------------|------|------|
| Sodium    | ppm | ASTM D5185(m) |      | <b>&lt;1</b> | <1   | <1   |
| Bore      | ppm | ASTM D5185(m) | 0    | <b>&lt;1</b> | 0    | <1   |
| Baryum    | ppm | ASTM D5185(m) | 0    | <b>0</b>     | 0    | <1   |
| Molybdène | ppm | ASTM D5185(m) | 0    | <b>0</b>     | 0    | 0    |
| Manganèse | ppm | ASTM D5185(m) | 1    | <b>&lt;1</b> | <1   | <1   |
| Magnésium | ppm | ASTM D5185(m) | 0    | <b>2</b>     | 1    | <1   |
| Calcium   | ppm | ASTM D5185(m) | 100  | <b>189</b>   | 96   | 95   |
| Phosphore | ppm | ASTM D5185(m) | 670  | <b>213</b>   | 168  | 170  |
| Zinc      | ppm | ASTM D5185(m) | 850  | <b>139</b>   | 63   | 70   |
| Soufre    | ppm | ASTM D5185(m) | 1600 | <b>990</b>   | 642  | 624  |
| Visc 40°C | cSt | ASTM D7279(m) | 47.9 | <b>42.1</b>  | 42.9 | 43.4 |



**Laboratoire** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**N° d'échantillon** : LH  
**N° de laboratoire** : 02615046  
**Numéro unique** : 5724141  
**Analyse** : MOB 1 ( Additional Tests: PQ, PrtCount )

**NEXOLIA, CHAPAIS ENERGIE SEC**  
 140 RUE DE LA CONGENERATION  
 CHAPAIS, QC  
 CA G0W 1H0  
 Contact: Carl Adams

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.

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