



LIEBHERR

OIL ANALYSIS REPORT

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



Machine Id
LIEBHERR LH22M 136874-1250

Component
Front Left Wheel Hub

Fluid
LIEBHERR GEAR BASIC 90 LS (--- GAL)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.
Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|----------|
| Sample Number | | Client Info | | LH | LH0249969 | --- |
| Sample Date | | Client Info | | 05 Jan 2024 | 25 Jan 2023 | --- |
| Machine Age | hrs | Client Info | | 1000 | 500 | --- |
| Oil Age | hrs | Client Info | | 0 | 0 | --- |
| Filter Age | hrs | Client Info | | 0 | 0 | --- |
| Oil Changed | | Client Info | | Changed | Changed | --- |
| Filter Changed | | Client Info | | None | N/A | --- |
| Sample Status | | | | NORMAL | NORMAL | --- |

WEAR

Les taux d'usure de tous les composants sont normaux.

| | | | | | | |
|--------------|--------|---------------|------|--------------|-------|-----|
| Iron | ppm | ASTM D5185(m) | >650 | 59 | 34 | --- |
| Chromium | ppm | ASTM D5185(m) | >4 | 1 | <1 | --- |
| Nickel | ppm | ASTM D5185(m) | >4 | <1 | <1 | --- |
| Titanium | ppm | ASTM D5185(m) | >4 | 0 | <1 | --- |
| Silver | ppm | ASTM D5185(m) | | 0 | <1 | --- |
| Aluminum | ppm | ASTM D5185(m) | >25 | 1 | <1 | --- |
| Lead | ppm | ASTM D5185(m) | >4 | <1 | <1 | --- |
| Copper | ppm | ASTM D5185(m) | >60 | 13 | 26 | --- |
| Tin | ppm | ASTM D5185(m) | >4 | 0 | 0 | --- |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | --- |
| White Metal | scalar | Visual* | NONE | VLITE | LIGHT | --- |
| Yellow Metal | scalar | Visual* | NONE | NONE | NONE | --- |

CONTAMINATION

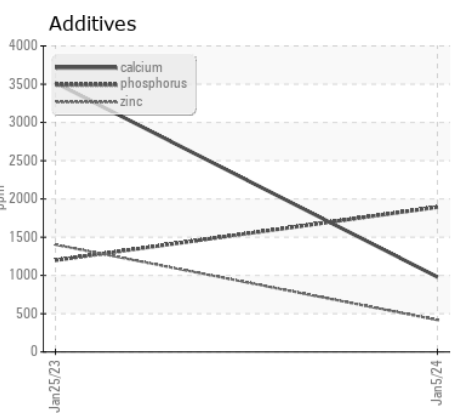
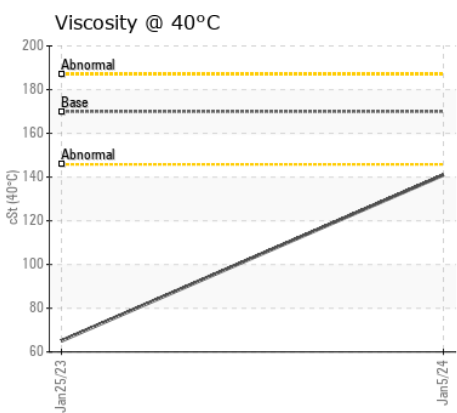
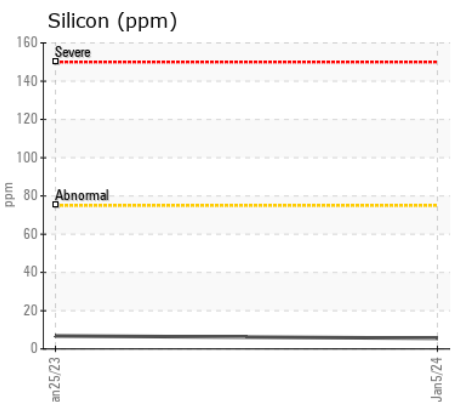
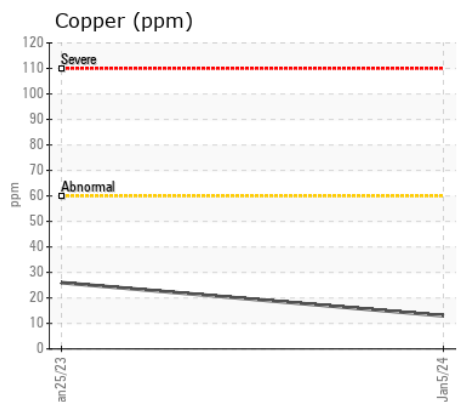
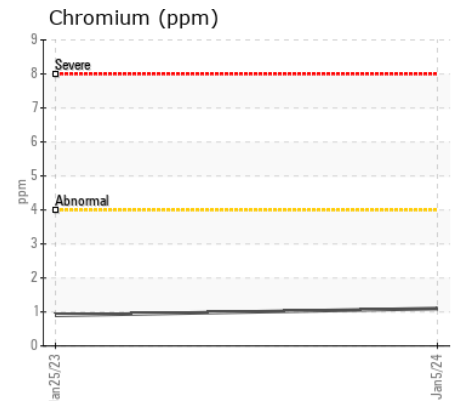
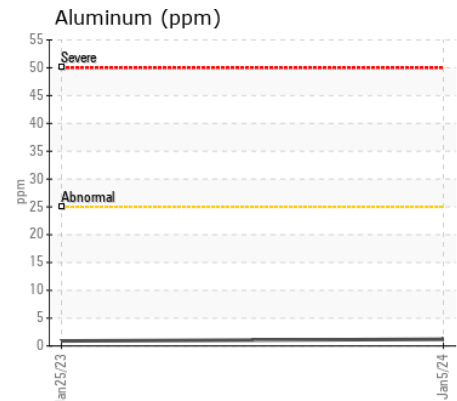
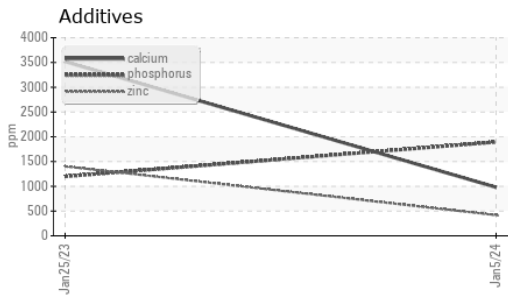
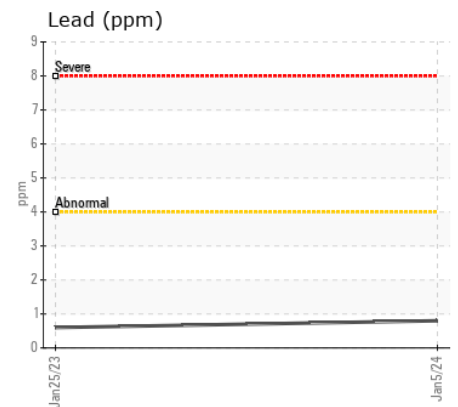
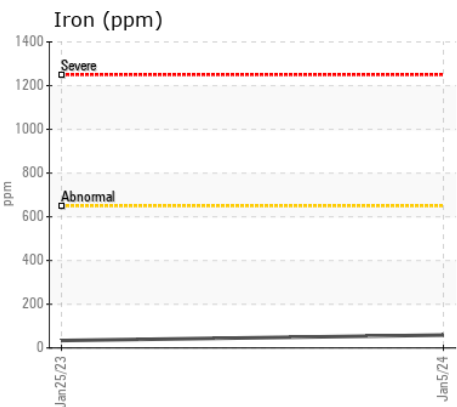
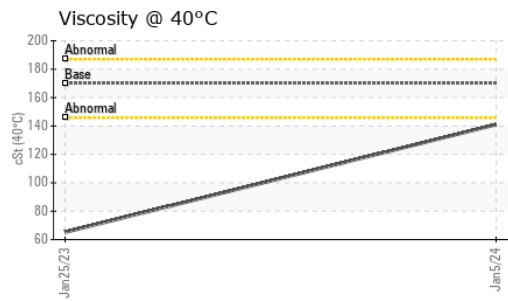
Il n'y a aucun indice de contamination dans l'huile.

| | | | | | | |
|------------------|--------|---------------|-------|--------------|-------|-----|
| Silicon | ppm | ASTM D5185(m) | >75 | 6 | 7 | --- |
| Potassium | ppm | ASTM D5185(m) | >20 | 1 | <1 | --- |
| Water | | WC Method | >0.2 | NEG | NEG | --- |
| Silt | scalar | Visual* | NONE | NONE | NONE | --- |
| Debris | scalar | Visual* | NONE | NONE | NONE | --- |
| Sand/Dirt | scalar | Visual* | NONE | NONE | NONE | --- |
| Appearance | scalar | Visual* | NORML | NORML | NORML | --- |
| Odor | scalar | Visual* | NORML | NORML | NORML | --- |
| Emulsified Water | scalar | Visual* | >0.2 | NEG | NEG | --- |

FLUID CONDITION

La viscosité de l'échantillon se situe dans la portée de l'SAE 90; nous vous conseillons de vérifier. Ceci, en plus des niveaux d'additifs, indique que la marque ou le type d'huile ne correspond pas à ce qui a été signalé. L'état de l'huile est acceptable pour la durée de service.

| | | | | | | |
|-------------|-----|---------------|-------|--------------|------|-----|
| Sodium | ppm | ASTM D5185(m) | | 11 | 19 | --- |
| Boron | ppm | ASTM D5185(m) | 0 | 19 | 101 | --- |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | 0 | --- |
| Molybdenum | ppm | ASTM D5185(m) | 0 | 0 | 0 | --- |
| Manganese | ppm | ASTM D5185(m) | 0 | 1 | 1 | --- |
| Magnesium | ppm | ASTM D5185(m) | <1 | 4 | 10 | --- |
| Calcium | ppm | ASTM D5185(m) | <1 | 980 | 3518 | --- |
| Phosphorus | ppm | ASTM D5185(m) | 2143 | 1893 | 1198 | --- |
| Zinc | ppm | ASTM D5185(m) | <1 | 418 | 1402 | --- |
| Sulfur | ppm | ASTM D5185(m) | 23468 | 17905 | 2825 | --- |
| Visc @ 40°C | cSt | ASTM D7279(m) | 170 | 141 | 65.1 | --- |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 LA REGIE DES MATIERES RESIDUELLES DU LAC ST-JEAN
Sample No. : LH **Recieved** : 12 Jan 2024 **625 RUE BERGERON OUEST**
Lab Number : 02608621 **Diagnosed** : 14 Jan 2024 **ALMA, QC**
Unique Number : 5709707 **Diagnostician** : Kevin Marson **CA G8B 1V3**
Test Package : MOB 1 **Contact: Service Manager**

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.

T:
F: