



LIEBHERR

OIL ANALYSIS REPORT

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



Machine Id
LIEBHERR LH30M 153712-1253
Component
Rear Left Wheel Hub
Fluid
LIEBHERR GEAR BASIC 90 LS (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|-------------|-------------|----------|
| Sample Number | | Client Info | | LH | LH | --- |
| Sample Date | | Client Info | | 30 Apr 2024 | 14 Dec 2023 | --- |
| Machine Age | hrs | Client Info | | 1001 | 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 | None | --- |
| Sample Status | | | | NORMAL | ABNORMAL | --- |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|---------------|------|------|-------|-----|
| Iron | ppm | ASTM D5185(m) | >450 | 20 | 14 | --- |
| Chromium | ppm | ASTM D5185(m) | >4 | <1 | <1 | --- |
| Nickel | ppm | ASTM D5185(m) | >2 | 0 | <1 | --- |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | --- |
| Silver | ppm | ASTM D5185(m) | | 0 | <1 | --- |
| Aluminum | ppm | ASTM D5185(m) | >15 | <1 | <1 | --- |
| Lead | ppm | ASTM D5185(m) | >4 | 0 | <1 | --- |
| Copper | ppm | ASTM D5185(m) | >75 | 2 | 3 | --- |
| Tin | ppm | ASTM D5185(m) | | 0 | 0 | --- |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | --- |
| White Metal | scalar | Visual* | NONE | NONE | VLITE | --- |
| Yellow Metal | scalar | Visual* | NONE | NONE | NONE | --- |

CONTAMINATION

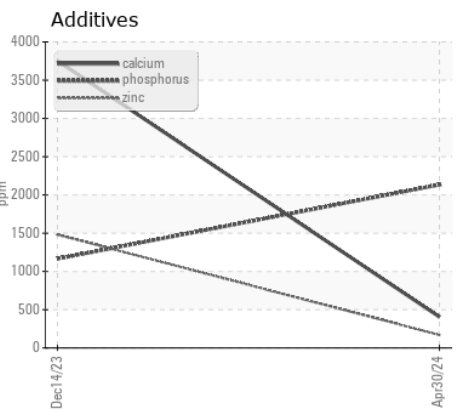
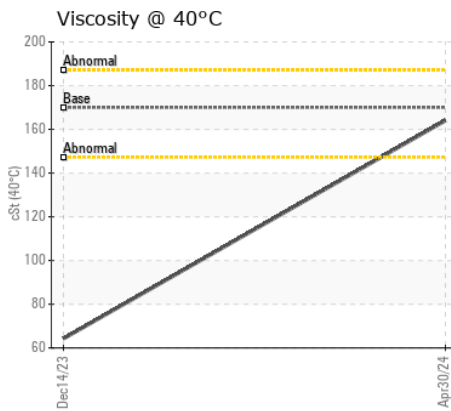
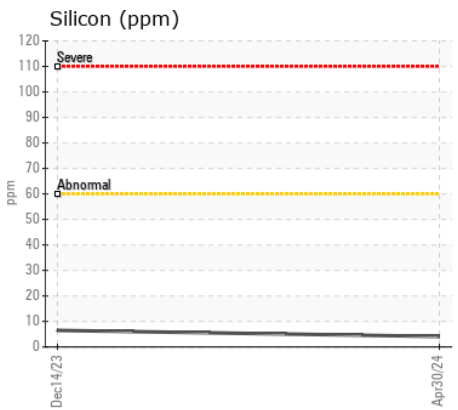
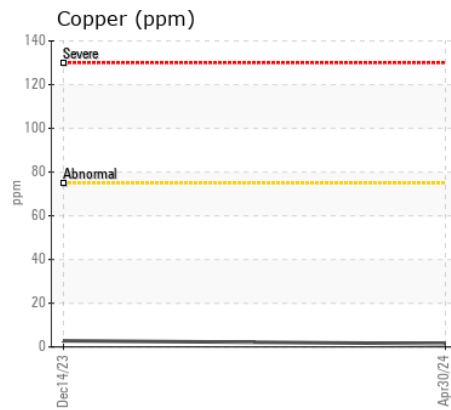
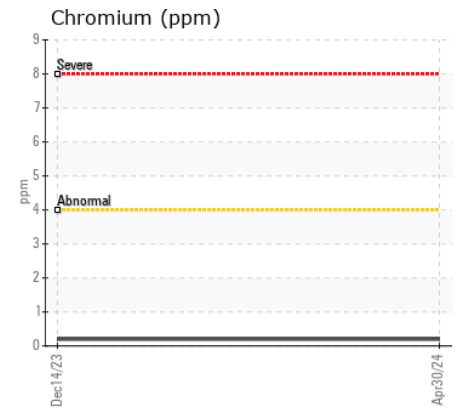
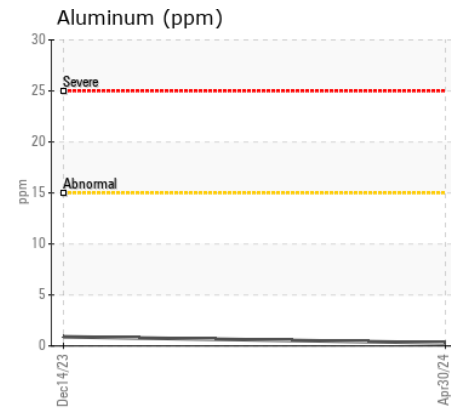
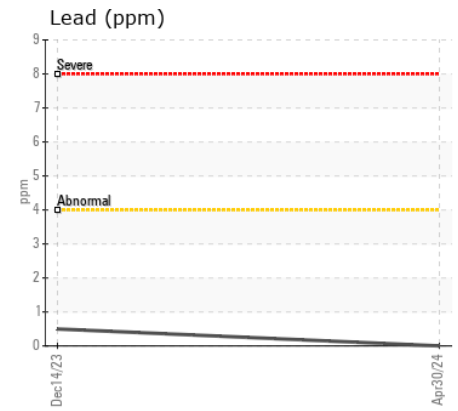
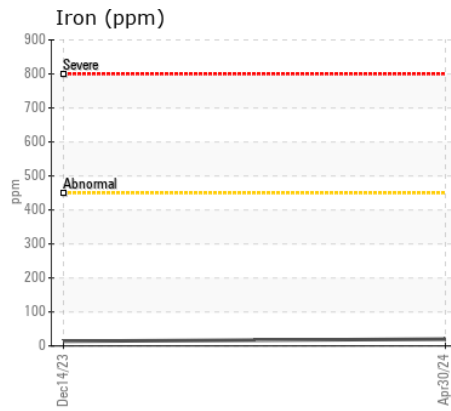
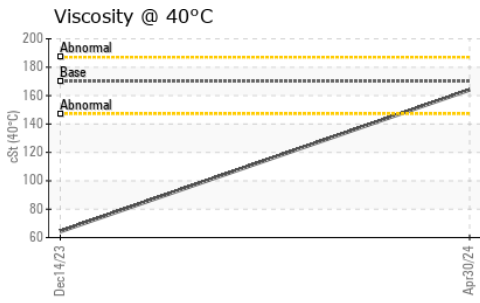
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|---------------|-------|-------|-------|-----|
| Silicon | ppm | ASTM D5185(m) | >60 | 4 | 6 | --- |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | 0 | --- |
| 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

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

| | | | | | | |
|-------------|-----|---------------|-------|-------|--------|-----|
| Sodium | ppm | ASTM D5185(m) | | 4 | 15 | --- |
| Boron | ppm | ASTM D5185(m) | 0 | 11 | 111 | --- |
| Barium | ppm | ASTM D5185(m) | 0 | <1 | <1 | --- |
| Molybdenum | ppm | ASTM D5185(m) | 0 | 0 | 0 | --- |
| Manganese | ppm | ASTM D5185(m) | 0 | 1 | 1 | --- |
| Magnesium | ppm | ASTM D5185(m) | <1 | 2 | 11 | --- |
| Calcium | ppm | ASTM D5185(m) | <1 | 406 | 3754 | --- |
| Phosphorus | ppm | ASTM D5185(m) | 2143 | 2134 | 1165 | --- |
| Zinc | ppm | ASTM D5185(m) | <1 | 169 | 1481 | --- |
| Sulfur | ppm | ASTM D5185(m) | 23468 | 22432 | 2847 | --- |
| Visc @ 40°C | cSt | ASTM D7279(m) | 170 | 164 | ▲ 64.2 | --- |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH
Lab Number : 02633251
Unique Number : 5774404
Test Package : MOB 1
Received : 03 May 2024
Tested : 03 May 2024
Diagnosed : 03 May 2024 - Wes Davis

Innovation Industrielle Boivin Inc.
 2205 de la Fonderie
 Chicoutimi, QC
 CA G7H 8B9
 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.

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