



# LIEBHERR

## OIL ANALYSIS REPORT

|                 |               |
|-----------------|---------------|
| WEAR            | <b>NORMAL</b> |
| CONTAMINATION   | <b>NORMAL</b> |
| FLUID CONDITION | <b>NORMAL</b> |



Area  
**(348643)**  
Machine Id  
**LIEBHERR PR736LGP 018793-1155**  
Component  
**Left Final Drive**  
Fluid  
**GEAR OIL SAE 75W90 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL SAE 75W90. Please confirm.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>LH0199304</b>   | LH0199296   | LH0199288   |
| Sample Date    |     | Client Info |           | <b>29 Apr 2024</b> | 06 Feb 2023 | 06 Dec 2021 |
| Machine Age    | hrs | Client Info |           | <b>3004</b>        | 1978        | 1074        |
| Oil Age        | hrs | Client Info |           | <b>0</b>           | 0           | 0           |
| Filter Age     | hrs | Client Info |           | <b>0</b>           | 0           | 0           |
| Oil Changed    |     | Client Info |           | <b>Not Changed</b> | Changed     | Changed     |
| Filter Changed |     | Client Info |           | <b>None</b>        | None        | N/A         |
| Sample Status  |     |             |           | <b>NORMAL</b>      | NORMAL      | NORMAL      |

### WEAR

All component wear rates are normal.

|              |        |               |      |              |      |      |
|--------------|--------|---------------|------|--------------|------|------|
| Iron         | ppm    | ASTM D5185(m) | >500 | <b>26</b>    | 51   | 109  |
| Chromium     | ppm    | ASTM D5185(m) | >10  | <b>0</b>     | <1   | 1    |
| Nickel       | ppm    | ASTM D5185(m) | >10  | <b>0</b>     | <1   | <1   |
| Titanium     | ppm    | ASTM D5185(m) |      | <b>0</b>     | 0    | 0    |
| Silver       | ppm    | ASTM D5185(m) |      | <b>0</b>     | 0    | <1   |
| Aluminum     | ppm    | ASTM D5185(m) | >25  | <b>&lt;1</b> | 1    | 2    |
| Lead         | ppm    | ASTM D5185(m) | >25  | <b>0</b>     | <1   | <1   |
| Copper       | ppm    | ASTM D5185(m) | >50  | <b>11</b>    | 26   | 28   |
| Tin          | ppm    | ASTM D5185(m) | >10  | <b>&lt;1</b> | 1    | 2    |
| Vanadium     | ppm    | ASTM D5185(m) |      | <b>0</b>     | 0    | 0    |
| White Metal  | scalar | Visual*       | NONE | <b>NONE</b>  | NONE | NONE |
| Yellow Metal | scalar | Visual*       | NONE | <b>NONE</b>  | NONE | NONE |

### CONTAMINATION

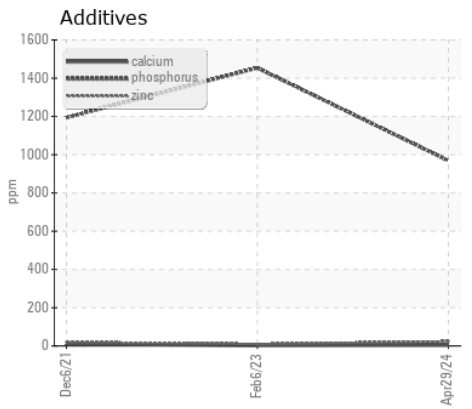
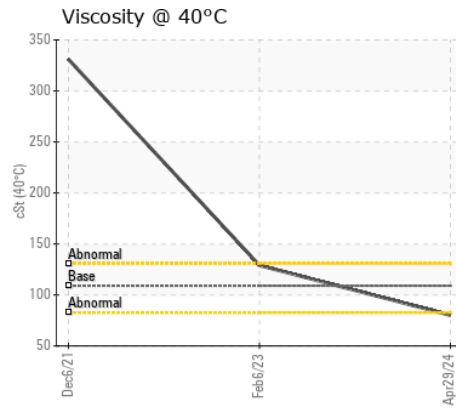
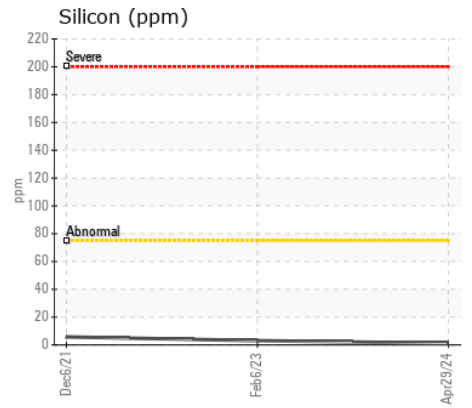
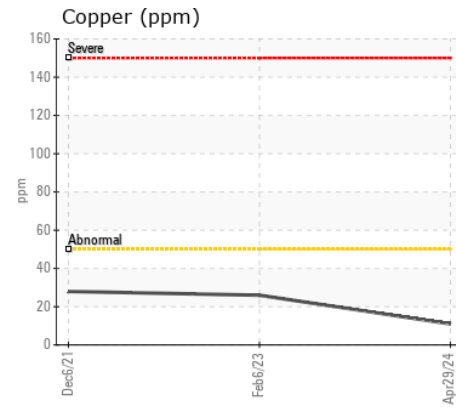
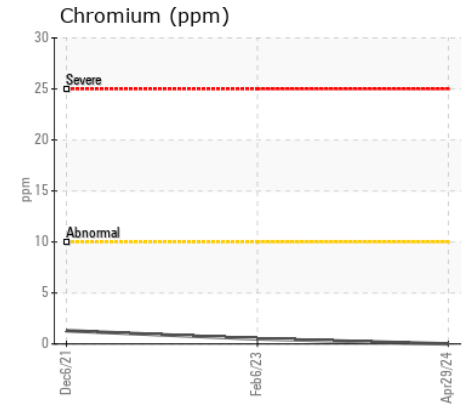
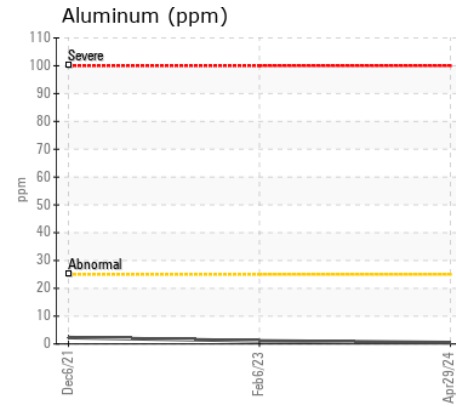
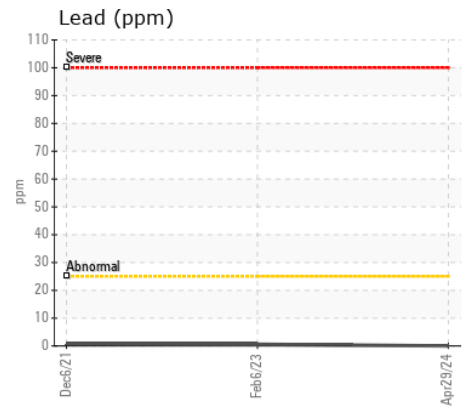
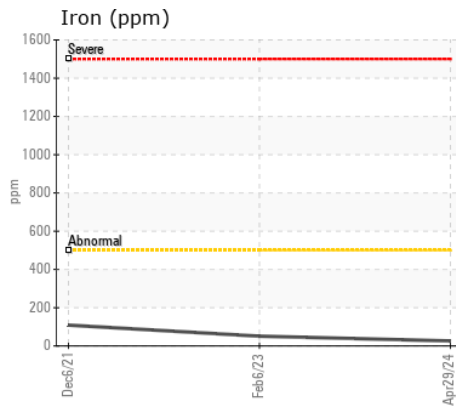
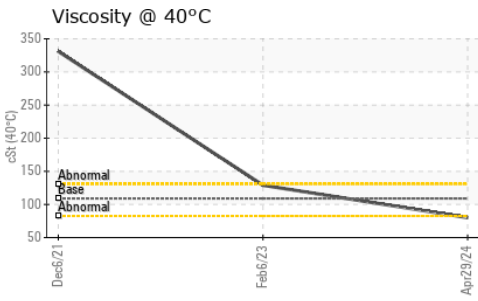
There is no indication of any contamination in the oil.

|                  |        |               |       |              |       |       |
|------------------|--------|---------------|-------|--------------|-------|-------|
| Silicon          | ppm    | ASTM D5185(m) | >75   | <b>1</b>     | 3     | 6     |
| Potassium        | ppm    | ASTM D5185(m) | >20   | <b>&lt;1</b> | <1    | 1     |
| Water            |        | WC Method     | >0.2  | <b>NEG</b>   | NEG   | NEG   |
| Silt             | scalar | Visual*       | NONE  | <b>NONE</b>  | NONE  | NONE  |
| Debris           | scalar | Visual*       | NONE  | <b>NONE</b>  | NONE  | LIGHT |
| Sand/Dirt        | scalar | Visual*       | NONE  | <b>NONE</b>  | NONE  | NONE  |
| Appearance       | scalar | Visual*       | NORML | <b>NORML</b> | NORML | NORML |
| Odor             | scalar | Visual*       | NORML | <b>NORML</b> | NORML | NORML |
| Emulsified Water | scalar | Visual*       | >0.2  | <b>NEG</b>   | NEG   | NEG   |

### FLUID CONDITION

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

|             |     |               |       |              |       |       |
|-------------|-----|---------------|-------|--------------|-------|-------|
| Sodium      | ppm | ASTM D5185(m) |       | <b>&lt;1</b> | 2     | 3     |
| Boron       | ppm | ASTM D5185(m) | 400   | <b>131</b>   | 176   | 4     |
| Barium      | ppm | ASTM D5185(m) | 200   | <b>5</b>     | 18    | 58    |
| Molybdenum  | ppm | ASTM D5185(m) | 12    | <b>0</b>     | 0     | <1    |
| Manganese   | ppm | ASTM D5185(m) |       | <b>0</b>     | <1    | 1     |
| Magnesium   | ppm | ASTM D5185(m) | 12    | <b>&lt;1</b> | 0     | 2     |
| Calcium     | ppm | ASTM D5185(m) | 150   | <b>5</b>     | 3     | 12    |
| Phosphorus  | ppm | ASTM D5185(m) | 1650  | <b>969</b>   | 1454  | 1194  |
| Zinc        | ppm | ASTM D5185(m) | 125   | <b>24</b>    | 10    | 20    |
| Sulfur      | ppm | ASTM D5185(m) | 22500 | <b>19337</b> | 24916 | 24847 |
| Visc @ 40°C | cSt | ASTM D7279(m) | 109   | <b>80.1</b>  | 129   | 331   |



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

**Sample No.** : LH0199304

**Lab Number** : 02635355

**Unique Number** : 5776508

**Test Package** : MOBCE

**Received** : 14 May 2024

**Tested** : 14 May 2024

**Diagnosed** : 14 May 2024 - Wes Davis

**COUNTY OF ST. PAUL NO. 19**

5015 - 49 AVENUE

ST. PAUL, AB

CA T0A 3A4

Contact: DD SKAWRONSKI-MUNRO

DSKAWRONSKI@COUNTY.STPAUL.AB.CA

T: (780)645-3006

F: (780)645-1800

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.