



LIEBHERR

OIL ANALYSIS REPORT

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



Machine Id
LIEBHERR LH50M 1216-98210
Component
Rear Differential
Fluid
GEAR OIL SAE 80W90 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|----------|
| Sample Number | | Client Info | | LH0290695 | LHMC103349 | --- |
| Sample Date | | Client Info | | 27 May 2024 | 19 Oct 2018 | --- |
| Machine Age | hrs | Client Info | | 1000 | 1875 | --- |
| 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

All component wear rates are normal.

| | | | | | | |
|--------------|--------|---------------|------|--------------|-------|-----|
| Iron | ppm | ASTM D5185(m) | >150 | 27 | 20 | --- |
| Chromium | ppm | ASTM D5185(m) | >2 | 0 | <1 | --- |
| Nickel | ppm | ASTM D5185(m) | >2 | 0 | 0 | --- |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | --- |
| Silver | ppm | ASTM D5185(m) | >4 | 0 | 2 | --- |
| Aluminum | ppm | ASTM D5185(m) | >7 | <1 | <1 | --- |
| Lead | ppm | ASTM D5185(m) | >4 | 0 | 0 | --- |
| Copper | ppm | ASTM D5185(m) | >135 | 4 | 13 | --- |
| Tin | ppm | ASTM D5185(m) | >3 | 0 | 0 | --- |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | --- |
| White Metal | scalar | Visual* | NONE | NONE | LIGHT | --- |
| Yellow Metal | scalar | Visual* | NONE | NONE | NONE | --- |

CONTAMINATION

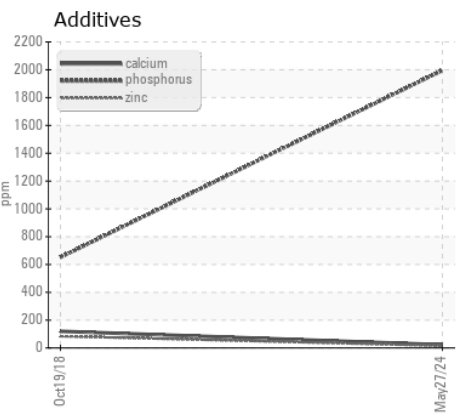
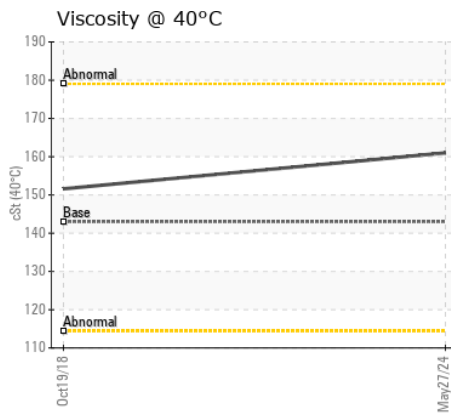
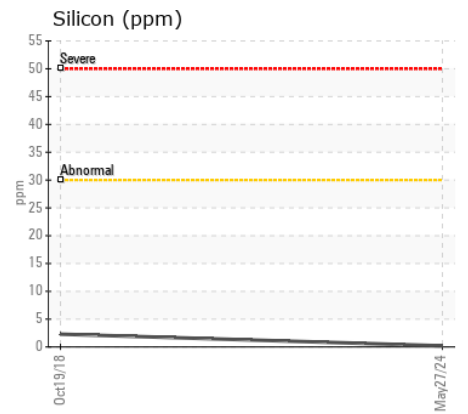
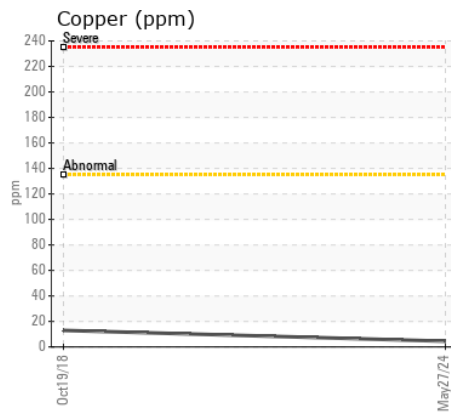
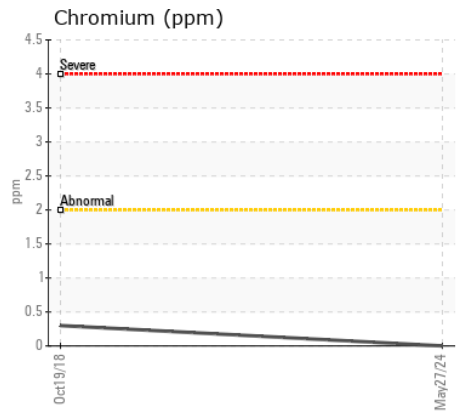
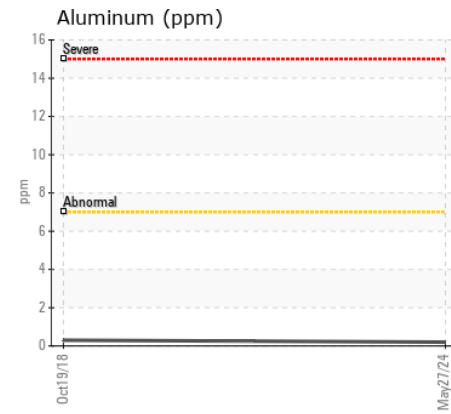
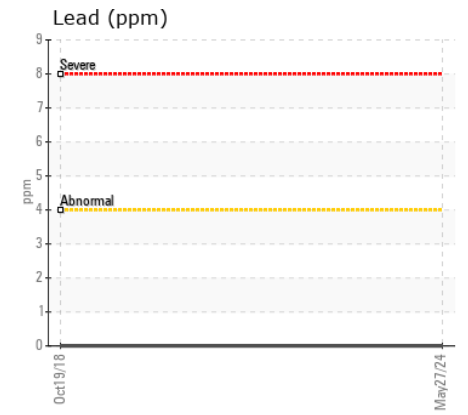
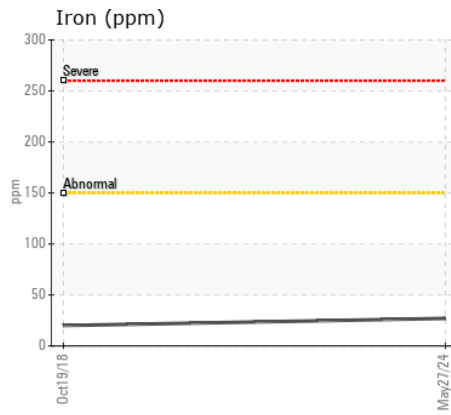
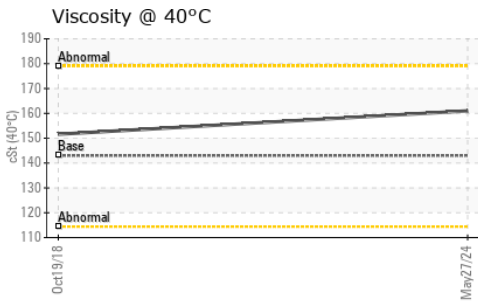
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|---------------|-------|--------------|-------|-----|
| Silicon | ppm | ASTM D5185(m) | >30 | <1 | 2 | --- |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | 2 | --- |
| 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) | >170 | 4 | 4 | --- |
| Boron | ppm | ASTM D5185(m) | 400 | 15 | 6 | --- |
| Barium | ppm | ASTM D5185(m) | 200 | 0 | 48 | --- |
| Molybdenum | ppm | ASTM D5185(m) | 12 | 0 | 19 | --- |
| Manganese | ppm | ASTM D5185(m) | | <1 | <1 | --- |
| Magnesium | ppm | ASTM D5185(m) | 12 | 5 | 54 | --- |
| Calcium | ppm | ASTM D5185(m) | 150 | 23 | 120 | --- |
| Phosphorus | ppm | ASTM D5185(m) | 1650 | 1996 | 652 | --- |
| Zinc | ppm | ASTM D5185(m) | 125 | 15 | 84 | --- |
| Sulfur | ppm | ASTM D5185(m) | 22500 | 27267 | 14415 | --- |
| Visc @ 40°C | cSt | ASTM D7279(m) | 143 | 161 | 151.6 | --- |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0290695 **Received** : 04 Jun 2024
Lab Number : 02639686 **Tested** : 05 Jun 2024
Unique Number : 5788848 **Diagnosed** : 05 Jun 2024 - Wes Davis
Test Package : MOB 1

SIMS BROTHERS
 1011 S. PROSPECT ST
 MARION, OH
 US 43302
 Contact: BOB LANCE

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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