



OIL ANALYSIS REPORT

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



Machine Id
141097-1216 LIEBHERR LH50M 141097-1216
 Component
Rear Right Wheel Hub
 Fluid
GEAR OIL SAE 80W90 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | DJJ0023788 | DJJ0011176 | DJJ0011198 |
| Sample Date | | Client Info | | 14 Jun 2024 | 13 Feb 2024 | 02 Aug 2023 |
| Machine Age | hrs | Client Info | | 4048 | 3271 | 2008 |
| Oil Age | hrs | Client Info | | 0 | 0 | 1500 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >325 | 9 | 26 | 32 |
| Chromium | ppm | ASTM D5185m | >3 | <1 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | <1 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >10 | 2 | 0 | 0 |
| Lead | ppm | ASTM D5185m | >4 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >75 | 4 | 17 | 1 |
| Tin | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

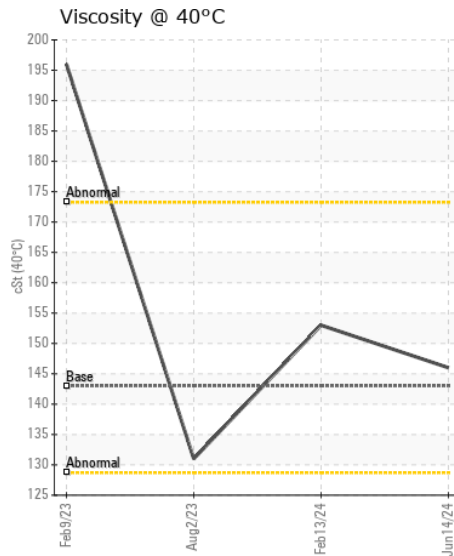
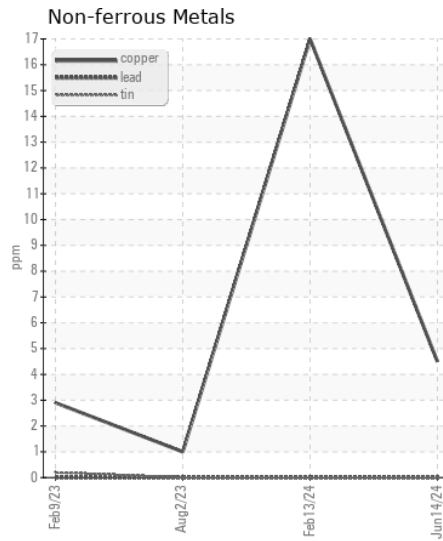
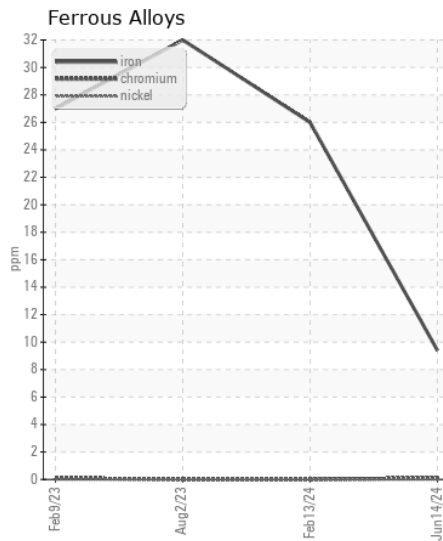
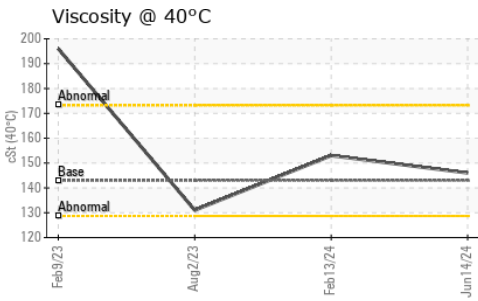
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >75 | 2 | 9 | 1 |
| Potassium | ppm | ASTM D5185m | >20 | <1 | 0 | 0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.2 | NEG | NEG | NEG |

FLUID CONDITION

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

| | | | | | | |
|-------------|-----|-------------|-------|--------------|-------|-------|
| Sodium | ppm | ASTM D5185m | >170 | 0 | 2 | 1 |
| Boron | ppm | ASTM D5185m | 400 | 1 | 2 | 0 |
| Barium | ppm | ASTM D5185m | 200 | 0 | <1 | 0 |
| Molybdenum | ppm | ASTM D5185m | 12 | <1 | <1 | 1 |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 12 | 2 | 2 | 7 |
| Calcium | ppm | ASTM D5185m | 150 | 23 | 146 | 180 |
| Phosphorus | ppm | ASTM D5185m | 1650 | 487 | 1421 | 708 |
| Zinc | ppm | ASTM D5185m | 125 | 14 | 52 | 88 |
| Sulfur | ppm | ASTM D5185m | 22500 | 13484 | 19334 | 20820 |
| Visc @ 40°C | cSt | ASTM D445 | 143 | 146 | 153 | 131 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0023788
Lab Number : 06213906
Unique Number : 11086770
Test Package : CONST

METAL RECYCLING SERVICES - GASTONIA
 5401 S YORK HWY
 GASTONIA, NC
 US 28052
 Contact: RYAN BOWDEN

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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