

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH30M 121854-1253 - Rear Differential

Sample No: LH0267092

Oil Type: GEAR OIL SAE 80W90



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Sample Information

| | | | | |
|---------------|--------------------|-------------|-------------|-------------|
| Sample Number | LH0267092 | LH0272747 | LH0264397 | LH0220805 |
| Sample Date | 17 May 2024 | 02 Jan 2024 | 04 Aug 2023 | 05 Dec 2022 |
| Machine Hours | 8113 | 6976 | 6007 | 3974 |
| Oil Hours | 0 | 0 | 0 | 0 |
| Oil Changed | Changed | Changed | Changed | Changed |
| Sample Status | NORMAL | NORMAL | NORMAL | NORMAL |



Oil Condition

| | | | | | |
|-------------|-----|------------|-----|-----|-----|
| Visc @ 40°C | cSt | 116 | 124 | 133 | 139 |
|-------------|-----|------------|-----|-----|-----|



Contamination

| Water | % | NEG | NEG | NEG | NEG |
|-----------|-----|--------------|-----|-----|-----|
| Silicon | ppm | <1 | 2 | 3 | 1 |
| Sodium | ppm | 2 | 0 | 1 | 1 |
| Potassium | ppm | 0 | 1 | 2 | 2 |



Wear Metals

| | | | | | |
|------------|-----|--------------|----|----|----|
| Iron | ppm | 14 | 13 | 38 | 24 |
| Copper | ppm | <1 | <1 | 3 | <1 |
| Lead | ppm | 0 | <1 | 0 | 0 |
| Tin | ppm | 0 | <1 | 0 | 0 |
| Aluminum | ppm | 0 | 2 | <1 | <1 |
| Chromium | ppm | <1 | <1 | <1 | <1 |
| Molybdenum | ppm | 2 | <1 | <1 | <1 |
| Nickel | ppm | 0 | <1 | <1 | 0 |
| Titanium | ppm | <1 | <1 | 0 | 0 |
| Silver | ppm | 0 | 0 | 0 | 0 |
| Manganese | ppm | <1 | <1 | 1 | 1 |
| Vanadium | ppm | 0 | 0 | 0 | 0 |



Additives

| | | | | | |
|------------|-----|--------------|-----|-----|-----|
| Calcium | ppm | 54 | 37 | 41 | 60 |
| Magnesium | ppm | 1 | 2 | 4 | 7 |
| Zinc | ppm | 31 | 9 | 18 | 15 |
| Phosphorus | ppm | 968 | 771 | 803 | 647 |
| Barium | ppm | <1 | 0 | 0 | 0 |
| Boron | ppm | 0 | 1 | 7 | 12 |

Diagnosis

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 80W90. Please confirm.

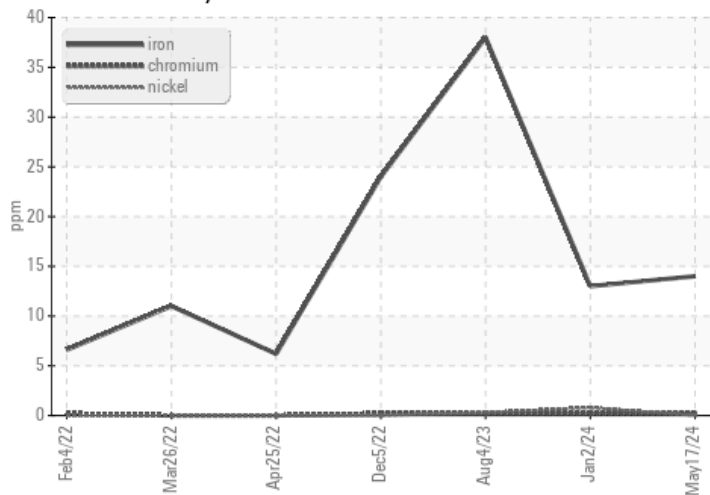
All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: LEC0008
 Unique No: 11048107
 Signed: Wes Davis
 Report Date: 28 May 2024

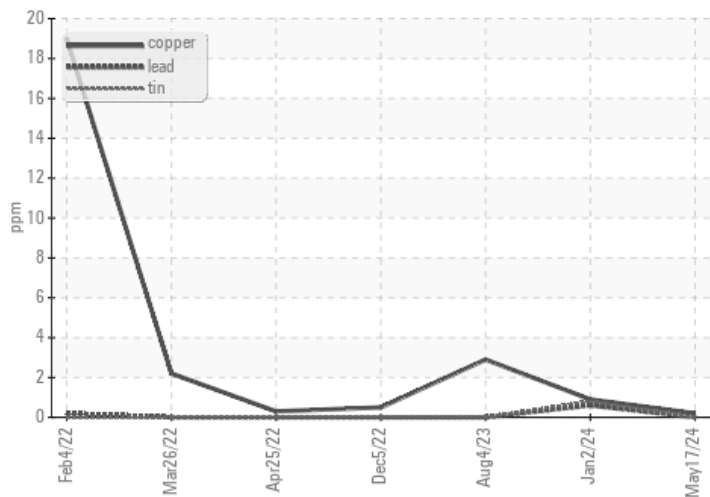


Graphs

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

