

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH60M 1204-75634 - Front Left Wheel Hub

Sample No: LH0243408

Oil Type: LIEBHERR GEAR BASIC 90 LS



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SAMPLE INFORMATION

| | | | | |
|---------------|--------------------|-------------|-------------|-------------|
| Sample Number | LH0243408 | LH0207644 | LH0185372 | LHMC133322 |
| Sample Date | 10 Aug 2023 | 16 Mar 2022 | 27 Aug 2021 | 06 Dec 2019 |
| Machine Hours | 15947 | 15048 | 13973 | 11965 |
| Oil Hours | 0 | 0 | 0 | 0 |
| Oil Changed | Changed | Changed | Changed | Changed |
| Sample Status | NORMAL | ABNORMAL | NORMAL | NORMAL |



OIL CONDITION

| | | | | | |
|-------------|-----|------------|-----|-----|-----|
| Visc @ 40°C | cSt | 182 | 187 | 175 | 138 |
|-------------|-----|------------|-----|-----|-----|



CONTAMINATION

| | | | | | |
|-----------|-----|----------|---|----|----|
| Silicon | ppm | 0 | 2 | <1 | <1 |
| Sodium | ppm | 2 | 3 | 2 | 1 |
| Potassium | ppm | 0 | 0 | 0 | 7 |



WEAR METALS

| | | | | | |
|------------|-----|-----------|----|----|----|
| Iron | ppm | 10 | 19 | 11 | 13 |
| Copper | ppm | 0 | 1 | 1 | 2 |
| Lead | ppm | 0 | 0 | 2 | 1 |
| Tin | ppm | 0 | 0 | 0 | 0 |
| Aluminum | ppm | 0 | <1 | 0 | <1 |
| Chromium | ppm | 0 | <1 | <1 | <1 |
| Molybdenum | ppm | 0 | <1 | 0 | 3 |
| Nickel | ppm | 0 | 0 | <1 | <1 |
| Titanium | ppm | 0 | <1 | <1 | 1 |
| Silver | ppm | 0 | 1 | 0 | 0 |
| Manganese | ppm | 0 | <1 | <1 | <1 |
| Vanadium | ppm | 0 | 0 | 0 | 0 |



ADDITIVES

| | | | | | |
|------------|-----|-------------|------|------|------|
| Calcium | ppm | 13 | 9 | 19 | 74 |
| Magnesium | ppm | 4 | 4 | 5 | 25 |
| Zinc | ppm | 10 | 7 | 14 | 48 |
| Phosphorus | ppm | 2330 | 2285 | 1940 | 1647 |
| Barium | ppm | 0 | 0 | 0 | <1 |
| Boron | ppm | 13 | 30 | 99 | 253 |

Diagnosis

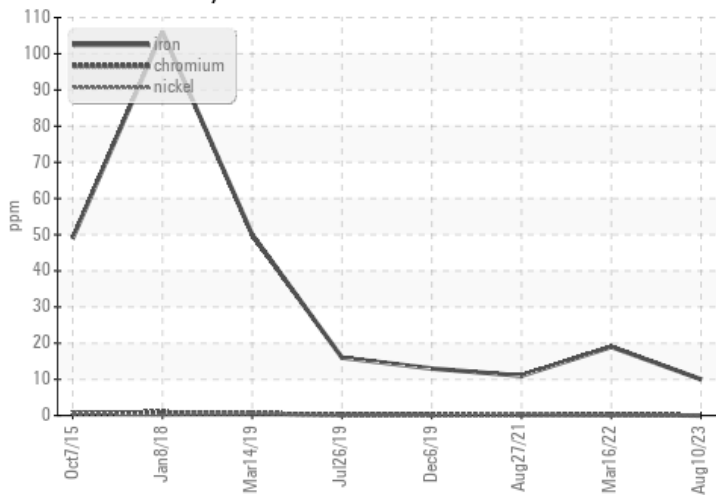
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: LEC0008
Unique No: 10608967
Signed: Sean Felton
Report Date: 21 Aug 2023

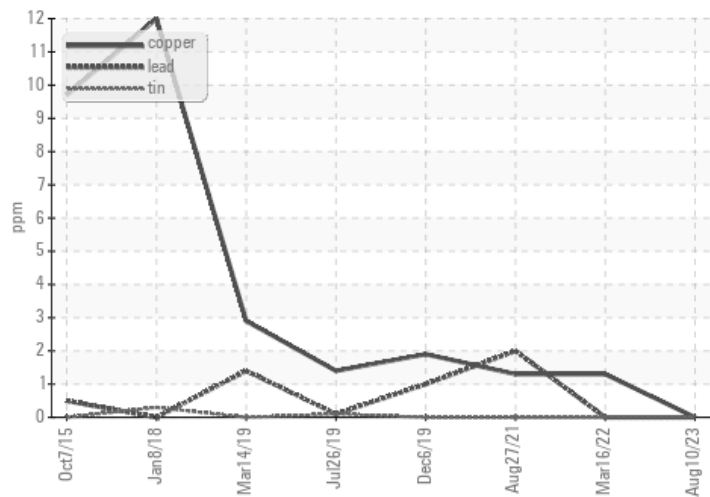


GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

