

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L580 040770-1170 - Rear Differential

Sample No: LH0264335

Oil Type: LIEBHERR GEAR BASIC 90 LS



SAMPLE INFORMATION

| | | | | |
|---------------|-------------|-------------|-------------|-------------|
| Sample Number | LH0264335 | LH0174206 | LH0216936 | LH0204333 |
| Sample Date | 08 Aug 2023 | 28 Apr 2023 | 24 Mar 2022 | 16 Sep 2021 |
| Machine Hours | 9297 | 8817 | 7403 | 6606 |
| Oil Hours | 500 | 500 | 500 | 1000 |
| Oil Changed | Changed | Not Changd | Not Changd | Changed |
| Sample Status | NORMAL | NORMAL | NORMAL | NORMAL |

LIEBHERR EQUIPMENT SOURCE

8200 FAYETTEVILLE ROAD
 RALEIGH, NC
 US 27603
 Contact: TRAVIS EGAN
 travis.egan@liebherr.com
 T:
 F: (919)329-0084



OIL CONDITION

| | | | | | |
|-------------|-----|-----|-----|-----|-----|
| Visc @ 40°C | cSt | 191 | 191 | 191 | 193 |
|-------------|-----|-----|-----|-----|-----|



CONTAMINATION

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



WEAR METALS

| | | | | | |
|------------|-----|-----|----|----|----|
| Iron | ppm | 104 | 96 | 58 | 75 |
| Copper | ppm | 2 | 1 | <1 | 2 |
| Lead | ppm | 0 | 0 | 0 | 0 |
| Tin | ppm | 0 | 0 | <1 | 0 |
| Aluminum | ppm | <1 | <1 | <1 | <1 |
| Chromium | ppm | 1 | 1 | <1 | <1 |
| Molybdenum | ppm | 29 | 27 | 13 | 24 |
| Nickel | ppm | <1 | 1 | 0 | 0 |
| Titanium | ppm | 0 | 0 | 0 | 0 |
| Silver | ppm | 0 | 0 | 0 | 0 |
| Manganese | ppm | 2 | 2 | 1 | 1 |
| Vanadium | ppm | 0 | 0 | 0 | 0 |



ADDITIVES

| | | | | | |
|------------|-----|------|------|------|------|
| Calcium | ppm | 32 | 31 | 22 | 32 |
| Magnesium | ppm | 1 | 1 | 0 | 0 |
| Zinc | ppm | 26 | 25 | 9 | 26 |
| Phosphorus | ppm | 2223 | 2477 | 2313 | 2210 |
| Barium | ppm | 2 | 0 | 0 | 0 |
| Boron | ppm | 5 | 4 | 9 | 18 |

Diagnosis

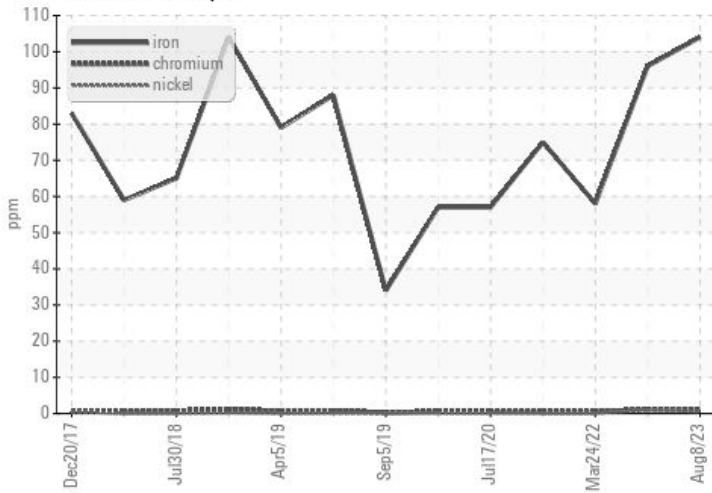
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: LIEBHERRNC
 Unique No: 10602504
 Signed: Don Baldrige
 Report Date: 14 Aug 2023

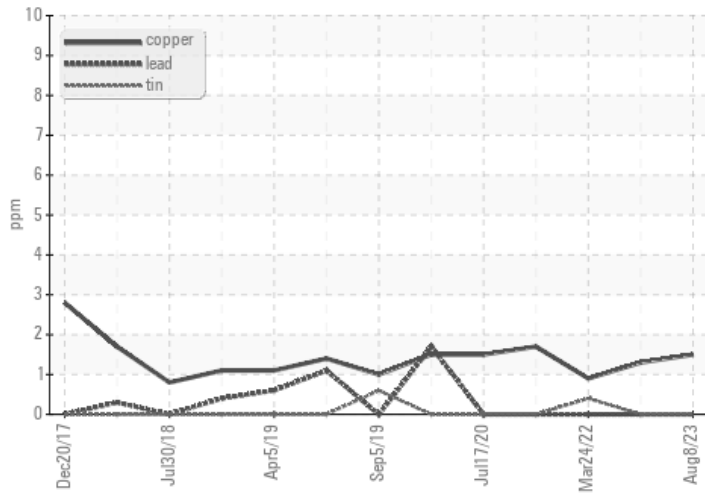


GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

