

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR R924 049837-1487 - Left Final Drive

Sample No: LH0271990

Oil Type: LIEBHERR GEAR BASIC 90 LS



LIEBHERR EQUIPMENT SOURCE
 8200 FAYETTEVILLE ROAD
 RALEIGH, NC
 US 27603
 Contact: Timothy Bailey
 timothy.bailey@liebherr.com
 T:
 F: (919)329-0084



Sample Information

| | | | | |
|---------------|-------------|-------------|-----|-----|
| Sample Number | LH0271990 | LH0257465 | --- | --- |
| Sample Date | 24 May 2024 | 20 Jun 2023 | --- | --- |
| Machine Hours | 1516 | 780 | --- | --- |
| Oil Hours | 800 | 0 | --- | --- |
| Oil Changed | Changed | Changed | --- | --- |
| Sample Status | ABNORMAL | NORMAL | --- | --- |



Oil Condition

| | | | | | |
|-------------|-----|-------|-------|-----|-----|
| Visc @ 40°C | cSt | ● 189 | ● 196 | --- | --- |
|-------------|-----|-------|-------|-----|-----|



Contamination

| | | | | | |
|-----------|-----|-------|-----|-----|-----|
| Water | % | NEG | NEG | --- | --- |
| Silicon | ppm | ● 205 | ● 2 | --- | --- |
| Sodium | ppm | ● 11 | ● 8 | --- | --- |
| Potassium | ppm | ● 15 | ● 5 | --- | --- |



Wear Metals

| | | | | | |
|------------|-----|-------|-------|-----|-----|
| Iron | ppm | ● 566 | ● 123 | --- | --- |
| Copper | ppm | ● <1 | ● <1 | --- | --- |
| Lead | ppm | ● 0 | ● 0 | --- | --- |
| Tin | ppm | ● <1 | ● 0 | --- | --- |
| Aluminum | ppm | ● 58 | ● 3 | --- | --- |
| Chromium | ppm | ● 7 | ● 2 | --- | --- |
| Molybdenum | ppm | ● <1 | ● <1 | --- | --- |
| Nickel | ppm | ● 2 | <1 | --- | --- |
| Titanium | ppm | ● 4 | <1 | --- | --- |
| Silver | ppm | ● 0 | ● 0 | --- | --- |
| Manganese | ppm | ● 7 | ● 2 | --- | --- |
| Vanadium | ppm | ● 0 | ● 0 | --- | --- |



Additives

| | | | | | |
|------------|-----|--------|--------|-----|-----|
| Calcium | ppm | ● 119 | ● 19 | --- | --- |
| Magnesium | ppm | ● 8 | ● 4 | --- | --- |
| Zinc | ppm | ● 53 | ● 35 | --- | --- |
| Phosphorus | ppm | ● 2248 | ● 1420 | --- | --- |
| Barium | ppm | ● 7 | ● 10 | --- | --- |
| Boron | ppm | ● <1 | ● 2 | --- | --- |

Diagnosis

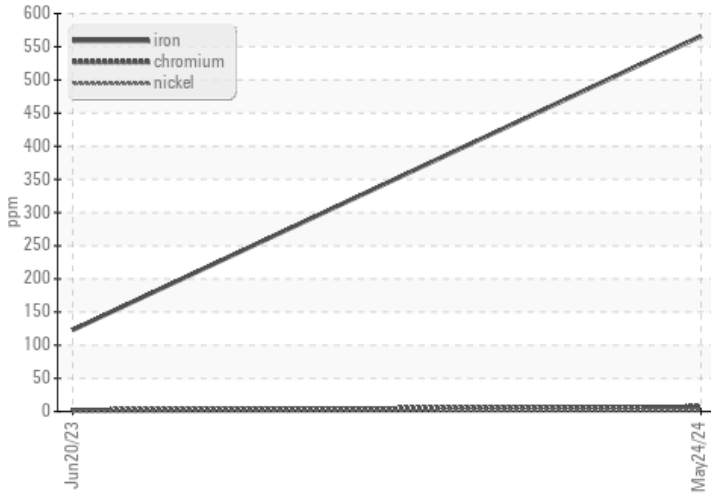
We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The condition of the oil is acceptable for the time in service.

Depot: LIEBHERRNC
 Unique No: 11062751
 Signed: Don Baldrige
 Report Date: 07 Jun 2024

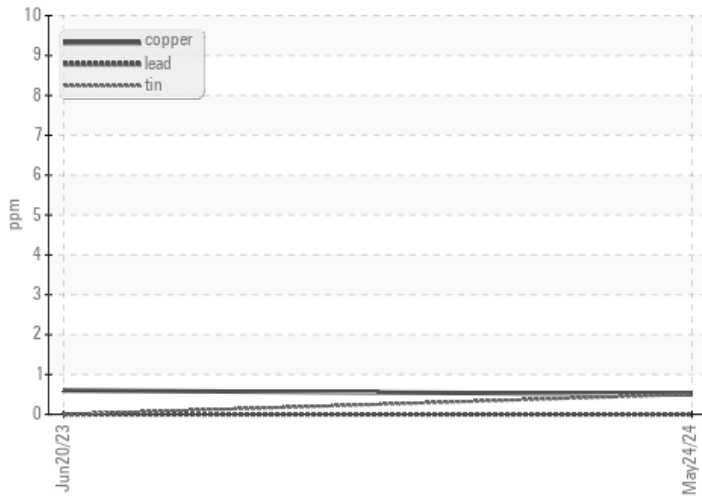


Graphs

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

