# LIEBHERR
## CONSTRUCTION EQUIPMENT


# LIEBHERR L580 1414-52139 - Hydraulic System

**Sample No:** LH0264116

**Oil Type:** LIEBHERR HYDRAULIC HVI

**BINDERHOLZ**
260 PIPER LN
ENFIELD, NC
US 27823
Contact: ROBERT BULLOCK
robert.bullock@binderholz.com
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F:

## SAMPLE INFORMATION

| | | | | | |
|---|---|---|---|---|---|
| Sample Number | | **LH0264116** | --- | --- | --- |
| Sample Date | | **11 Aug 2023** | --- | --- | --- |
| Machine Hours | | **2270** | --- | --- | --- |
| Oil Hours | | **2270** | --- | --- | --- |
| Oil Changed | | **Not Changd** | --- | --- | --- |
| Sample Status | | **ABNORMAL** | --- | --- | --- |

## OIL CONDITION

| | | | | | |
|---|---|---|---|---|---|
| Visc @ 40°C | cSt | **43.2** | --- | --- | --- |
| Acid Number (AN) | mg KOH/g | **0.86** | --- | --- | --- |

## CONTAMINATION

| | | | | | |
|---|---|---|---|---|---|
| Particles >4µm | | **6352** | --- | --- | --- |
| Particles >6µm | | **391** | --- | --- | --- |
| Particles >14µm | | **28** | --- | --- | --- |
| ISO 4406:1999 (c) | | **20/16/12** | --- | --- | --- |
| Silicon | ppm | **4** | --- | --- | --- |
| Sodium | ppm | **0** | --- | --- | --- |
| Potassium | ppm | **2** | --- | --- | --- |

## WEAR METALS

| | | | | | |
|---|---|---|---|---|---|
| Iron | ppm | **51** | --- | --- | --- |
| Copper | ppm | **9** | --- | --- | --- |
| Lead | ppm | **10** | --- | --- | --- |
| Tin | ppm | **<1** | --- | --- | --- |
| Aluminum | ppm | **2** | --- | --- | --- |
| Chromium | ppm | **8** | --- | --- | --- |
| Molybdenum | ppm | **<1** | --- | --- | --- |
| Nickel | ppm | **0** | --- | --- | --- |
| Titanium | ppm | **0** | --- | --- | --- |
| Silver | ppm | **0** | --- | --- | --- |
| Manganese | ppm | **<1** | --- | --- | --- |
| Vanadium | ppm | **0** | --- | --- | --- |

## ADDITIVES

| | | | | | |
|---|---|---|---|---|---|
| Calcium | ppm | **1344** | --- | --- | --- |
| Magnesium | ppm | **9** | --- | --- | --- |
| Zinc | ppm | **789** | --- | --- | --- |
| Phosphorus | ppm | **607** | --- | --- | --- |
| Barium | ppm | **0** | --- | --- | --- |
| Boron | ppm | **0** | --- | --- | --- |

## Diagnosis

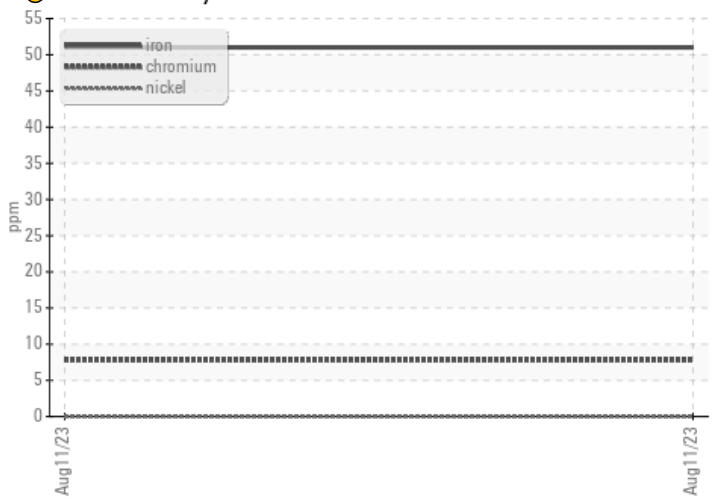
No corrective action is recommended at this time. Resample at the next service interval to monitor.The iron level is abnormal. The lead level is abnormal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

**Depot:** BINENF
**Unique No:** 10604755
**Signed:** Jonathan Hester
**Report Date:** 16 Aug 2023

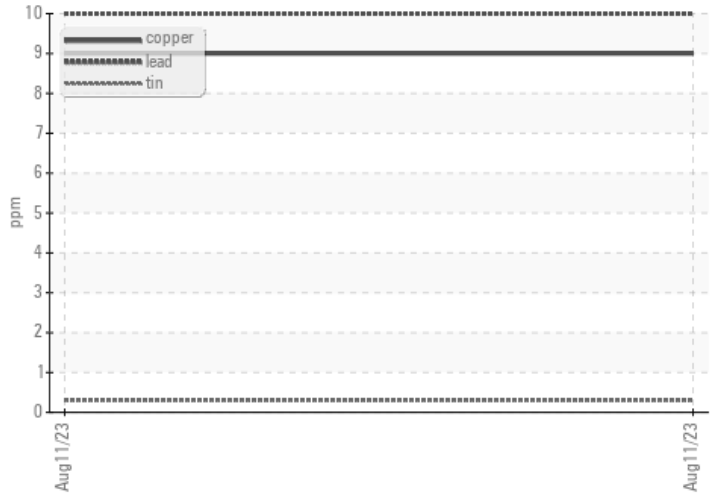
# LIEBHERR
## CONSTRUCTION EQUIPMENT


## GRAPHS

### Ferrous Alloys

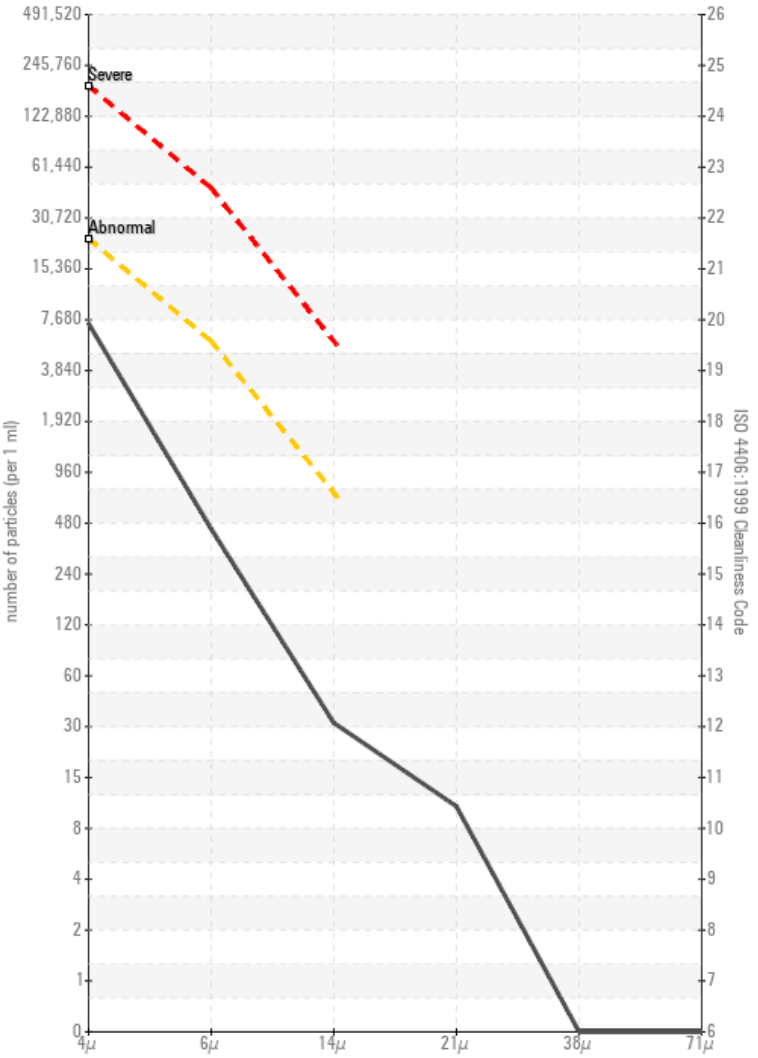



### Non-ferrous Metals




### Viscosity @ 40°C


### Particle Count




### Acid Number