

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR TA230 144017-1513 - Front Axle

Sample No: LH0268550

Oil Type: LIEBHERR GEAR MF 80W



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



#### SAMPLE INFORMATION

Sample Number	LH0268550	---	---	---
Sample Date	11 Oct 2023	---	---	---
Machine Hours	1356	---	---	---
Oil Hours	671	---	---	---
Oil Changed	Not Chngd	---	---	---
Sample Status	ABNORMAL	---	---	---



#### OIL CONDITION

Visc @ 40°C	cSt	● 57.2	---	---	---
-------------	-----	--------	-----	-----	-----



#### CONTAMINATION

Silicon	ppm	● 14	---	---	---
Sodium	ppm	● 9	---	---	---
Potassium	ppm	● <1	---	---	---



#### WEAR METALS

Iron	ppm	● 108	---	---	---
Copper	ppm	● 102	---	---	---
Lead	ppm	● 0	---	---	---
Tin	ppm	● 3	---	---	---
Aluminum	ppm	● 2	---	---	---
Chromium	ppm	● 1	---	---	---
Molybdenum	ppm	● 0	---	---	---
Nickel	ppm	● 4	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	● 17	---	---	---
Vanadium	ppm	0	---	---	---



#### ADDITIVES

Calcium	ppm	● 3167	---	---	---
Magnesium	ppm	● 5	---	---	---
Zinc	ppm	● 1389	---	---	---
Phosphorus	ppm	● 1058	---	---	---
Barium	ppm	● 0	---	---	---
Boron	ppm	● 47	---	---	---

#### Diagnosis

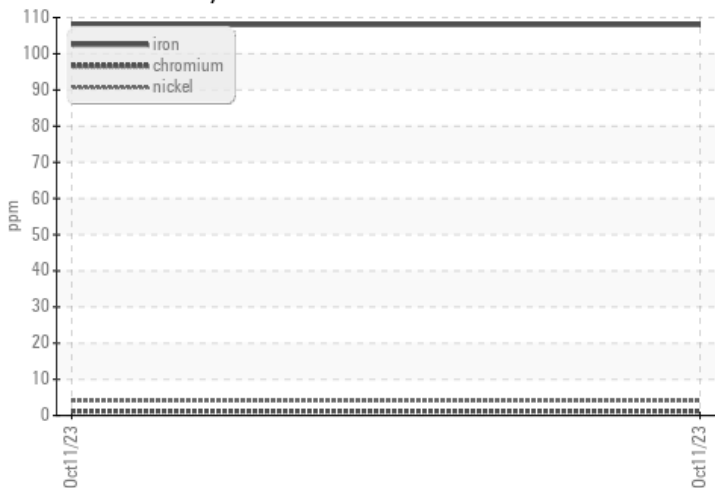
No corrective action is recommended at this time. Resample at the next service interval to monitor. The copper level is abnormal. All other component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

**Depot:** LIEBHERRNC  
**Unique No:** 10697342  
**Signed:** Don Baldrige  
**Report Date:** 18 Oct 2023

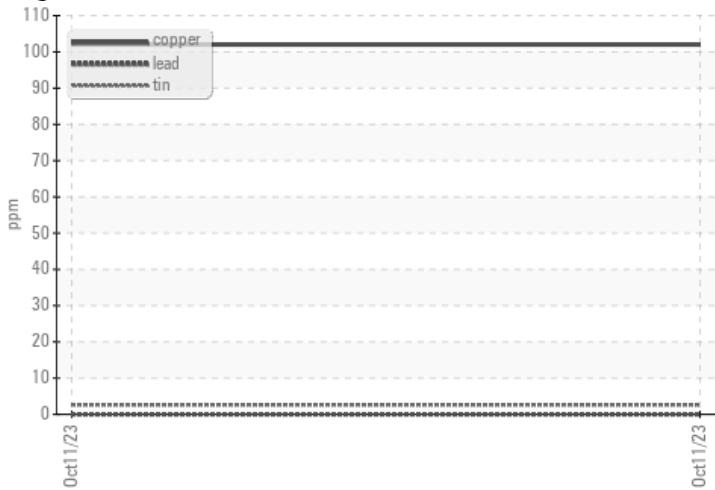


### GRAPHS

#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C

