

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LTM1130-5.1066718 - 2 Winch

Sample No: LH0259113

Oil Type: PG 220



#### SAMPLE INFORMATION

Sample Number	LH0259113	---	---	---
Sample Date	14 Feb 2024	---	---	---
Machine Hours	0	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	SEVERE	---	---	---

LIEBHERR USA CO - MOBILE AND CRAWLER CRANES  
 4100 CHESTNUT AVENUE  
 NEWPORT NEWS, VA  
 US 23607  
 Contact: TERENCE VANDERLENDE  
 TERENCE.VANDERLENDE@LIEBHERR.COM  
 T:  
 F:



#### OIL CONDITION

Visc @ 40°C	cSt	● 183	---	---	---
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#### CONTAMINATION

Water	%	● 9.16	---	---	---
Silicon	ppm	● 8	---	---	---
Sodium	ppm	● <1	---	---	---
Potassium	ppm	● 3	---	---	---



#### WEAR METALS

Iron	ppm	● 274	---	---	---
Copper	ppm	● 5	---	---	---
Lead	ppm	● 0	---	---	---
Tin	ppm	● 0	---	---	---
Aluminum	ppm	● <1	---	---	---
Chromium	ppm	● <1	---	---	---
Molybdenum	ppm	● 0	---	---	---
Nickel	ppm	● 12	---	---	---
Titanium	ppm	● 0	---	---	---
Silver	ppm	● 0	---	---	---
Manganese	ppm	● 6	---	---	---
Vanadium	ppm	● 0	---	---	---



#### ADDITIVES

Calcium	ppm	● 7	---	---	---
Magnesium	ppm	● 2	---	---	---
Zinc	ppm	● 216	---	---	---
Phosphorus	ppm	● 271	---	---	---
Barium	ppm	● 0	---	---	---
Boron	ppm	● 2	---	---	---

#### Diagnosis

We advise that you check for the source of water entry. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Gear wear is indicated. There is a high concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil. The oil viscosity is lower than normal. The oil is no longer serviceable due to the presence of contaminants.

Depot: LIENEW  
 Unique No: 10886616  
 Signed: Sean Felton  
 Report Date: 21 Feb 2024

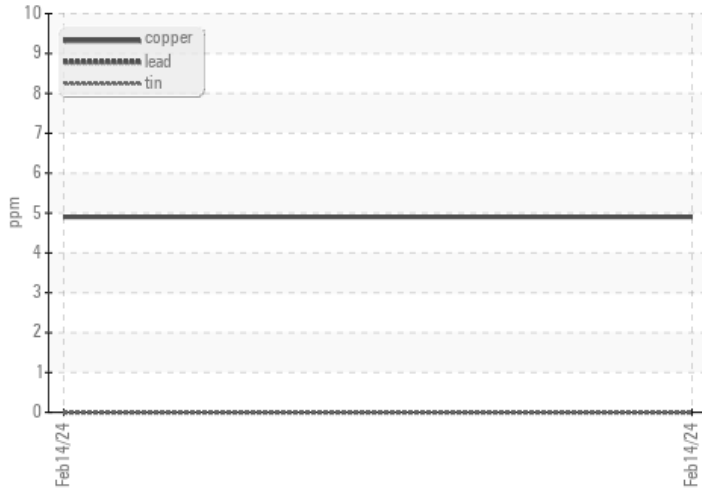


### GRAPHS

#### ● Ferrous Alloys



#### Non-ferrous Metals



#### ● Viscosity @ 40°C

