

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR TA230 146110-1513 - Front Rear Axle

Sample No: LH0272022

Oil Type: LIEBHERR GEAR BASIC 90 LS



**LIEBHERR EQUIPMENT SOURCE**  
 8200 FAYETTEVILLE ROAD  
 RALEIGH, NC  
 US 27603  
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 T:  
 F: (919)329-0084



#### Sample Information

Sample Number	LH0272022	---	---	---
Sample Date	23 Apr 2024	---	---	---
Machine Hours	1278	---	---	---
Oil Hours	1278	---	---	---
Oil Changed	N/A	---	---	---
Sample Status	ATTENTION	---	---	---



#### Oil Condition

Visc @ 40°C	cSt	62.2	---	---	---
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#### Contamination

Water	%	NEG	---	---	---
Silicon	ppm	10	---	---	---
Sodium	ppm	10	---	---	---
Potassium	ppm	0	---	---	---



#### Wear Metals

Iron	ppm	133	---	---	---
Copper	ppm	73	---	---	---
Lead	ppm	0	---	---	---
Tin	ppm	3	---	---	---
Aluminum	ppm	<1	---	---	---
Chromium	ppm	<1	---	---	---
Molybdenum	ppm	0	---	---	---
Nickel	ppm	1	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	30	---	---	---
Vanadium	ppm	0	---	---	---



#### Additives

Calcium	ppm	3143	---	---	---
Magnesium	ppm	9	---	---	---
Zinc	ppm	1326	---	---	---
Phosphorus	ppm	1324	---	---	---
Barium	ppm	1	---	---	---
Boron	ppm	58	---	---	---

#### Diagnosis

Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.

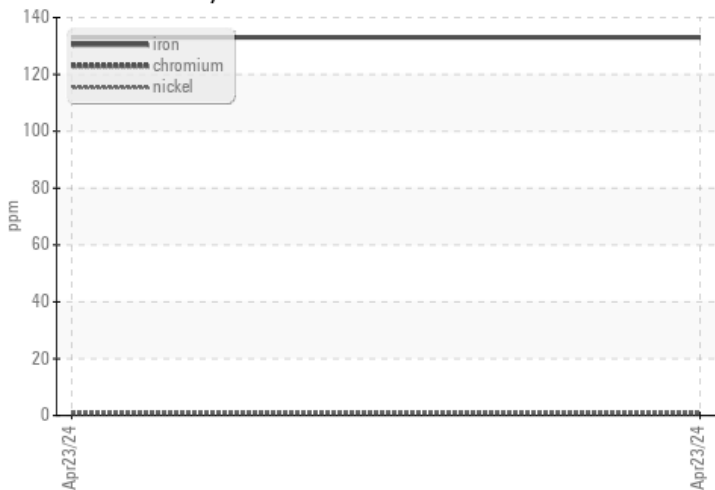
Depot: LIEBHERRNC  
 Unique No: 10996210  
 Signed: Don Baldrige  
 Report Date: 29 Apr 2024

Submitted By: TAYLOR BLALOCK

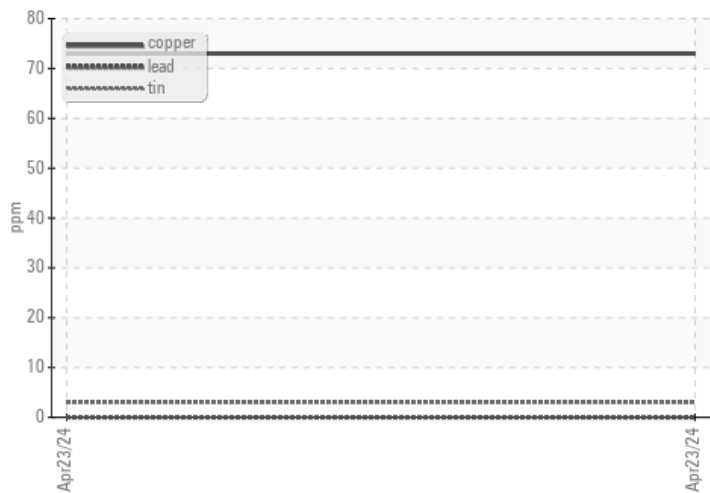


### Graphs

#### Ferrous Alloys



#### Non-ferrous Metals



#### ● Viscosity @ 40°C

