

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR R944 042563-194 - Rear Differential

Sample No: LH0243877

Oil Type: LIEBHERR GEAR BASIC 90 LS



**LIEBHERR EQUIPMENT SOURCE**  
 4100 CHESTNUT AVENUE  
 NEWPORT NEWS, VA  
 US 23607  
 Contact: LUKE APPLEBY  
 Lucas.Appleby@liebherr.com  
 T:  
 F: (757)298-8700



#### SAMPLE INFORMATION

Sample Number	LH0243877	LH0229405	LHMC93580	---
Sample Date	29 Feb 2024	03 Oct 2022	29 Dec 2015	---
Machine Hours	29512	28033	15560	---
Oil Hours	0	2000	1000	---
Oil Changed	Changed	Not Changd	Changed	---
Sample Status	ATTENTION	ABNORMAL	ATTENTION	---



#### OIL CONDITION

Visc @ 40°C	cSt	312	308	311.0	---
-------------	-----	-----	-----	-------	-----



#### CONTAMINATION

Water	%	NEG	NEG	NEG	---
Silicon	ppm	3	8	<1	---
Sodium	ppm	0	1	<1	---
Potassium	ppm	4	1	11	---



#### WEAR METALS

Iron	ppm	19	19	5	---
Copper	ppm	25	11	6	---
Lead	ppm	<1	0	<1	---
Tin	ppm	<1	0	0	---
Aluminum	ppm	2	4	<1	---
Chromium	ppm	<1	0	0	---
Molybdenum	ppm	2	2	0	---
Nickel	ppm	<1	0	<1	---
Titanium	ppm	<1	<1	0	---
Silver	ppm	0	<1	0	---
Manganese	ppm	<1	<1	0	---
Vanadium	ppm	<1	<1	0	---



#### ADDITIVES

Calcium	ppm	61	48	24	---
Magnesium	ppm	6	7	1	---
Zinc	ppm	54	38	14	---
Phosphorus	ppm	1146	854	424	---
Barium	ppm	<1	0	0	---
Boron	ppm	218	167	47	---

#### Diagnosis

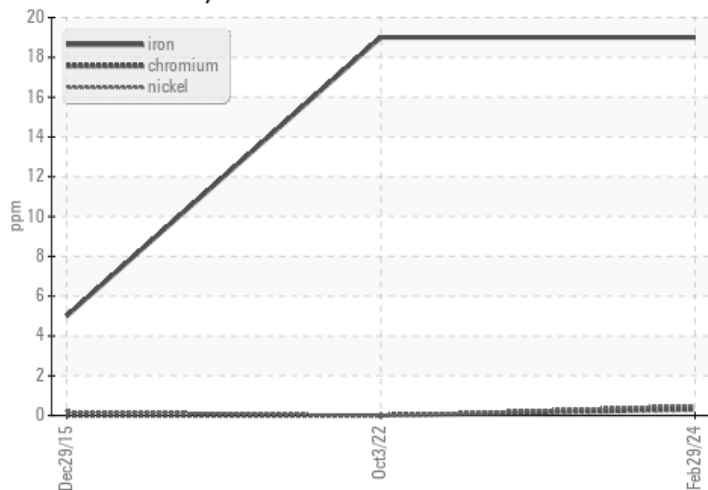
The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the component. The oil viscosity is higher than normal. Confirm oil type.

Depot: LIEBHERRUS  
 Unique No: 10914460  
 Signed: Don Baldrige  
 Report Date: 09 Mar 2024

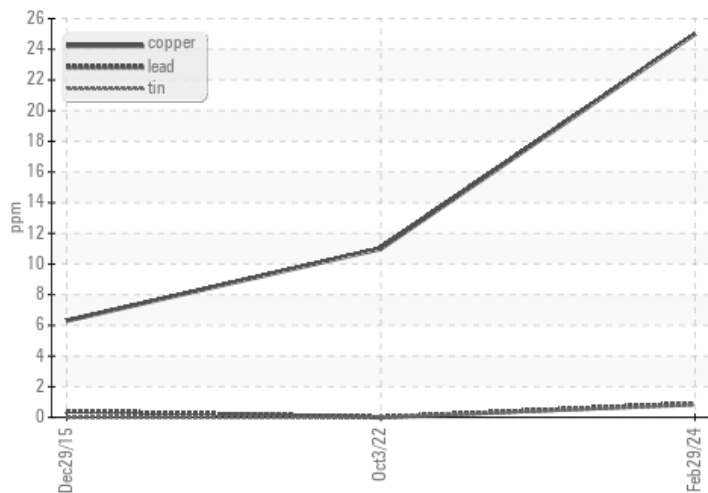


### GRAPHS

#### Ferrous Alloys



#### Non-ferrous Metals



#### ● Viscosity @ 40°C

