

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### [[CLEVELAND CLIFF]] LIEBHERR LH60 107739-1217 - Front Right W

Sample No: LH0268105

Oil Type: LIEBHERR GEAR BASIC 90 LS



**FINKBINER EQUIPMENT CO.**  
 15 W 400 N FRONTAGE RD  
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 US 60527  
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### SAMPLE INFORMATION

Sample Number	LH0268105	LH0244206	LH0200126	LH0190709
Sample Date	22 Jan 2024	26 Jan 2023	24 Sep 2021	21 Jun 2021
Machine Hours	8998	7471	5121	4876
Oil Hours	1000	0	0	0
Oil Changed	Changed	Changed	N/A	N/A
Sample Status	ABNORMAL	NORMAL	NORMAL	NORMAL



### OIL CONDITION

Visc @ 40°C	cSt	150	135	144	176
		●		●	●



### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	● 23	● 1	● <1	● 2
Sodium	ppm	● 0	● 0	● 3	● 3
Potassium	ppm	● 1	● 3	● 2	● 2



### WEAR METALS

Iron	ppm	● 89	● 61	● 30	● 66
Copper	ppm	● 123	● 13	● 7	● 10
Lead	ppm	● 1	● 0	● <1	● <1
Tin	ppm	● <1	● 0	● 0	● 0
Aluminum	ppm	● 2	● 0	● 0	● 0
Chromium	ppm	● <1	● <1	● <1	● <1
Molybdenum	ppm	● 5	● <1	● <1	● 1
Nickel	ppm	● <1	● 0	● <1	● <1
Titanium	ppm	● <1	● 0	● 0	● <1
Silver	ppm	<1	0	0	0
Manganese	ppm	● 4	● <1	● <1	● 2
Vanadium	ppm	<1	0	0	0



### ADDITIVES

Calcium	ppm	● 69	● 18	● 14	● 31
Magnesium	ppm	● 2	● 4	● 2	● 8
Zinc	ppm	● 46	● 16	● 0	● 11
Phosphorus	ppm	● 1210	● 1886	● 1941	● 2079
Barium	ppm	● 0	● 0	● 8	● 21
Boron	ppm	● <1	● 345	233	● 113

### Diagnosis

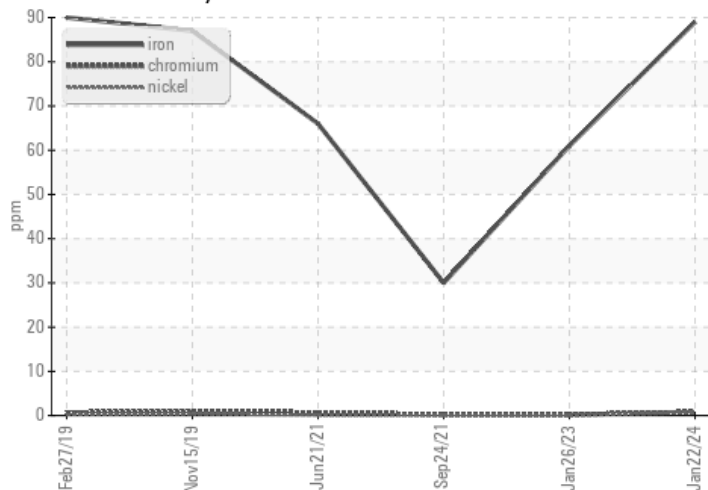
The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Moderate concentration of visible yellow metal present. Bearing and/or bushing wear is indicated. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: LEC0033  
 Unique No: 10884187  
 Signed: Don Baldrige  
 Report Date: 19 Feb 2024

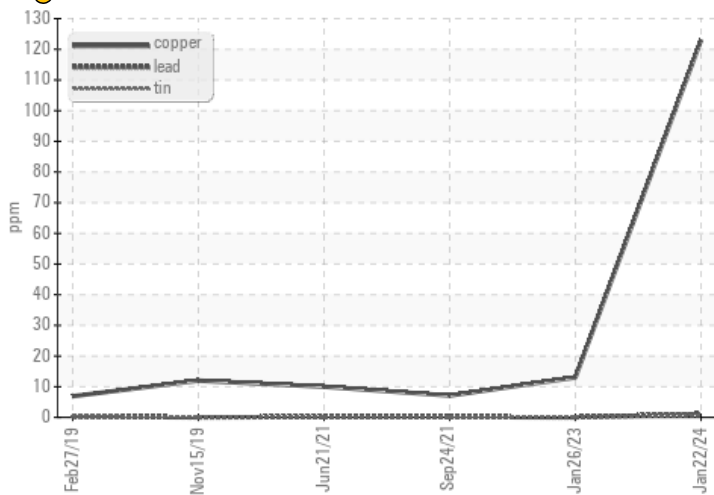


### GRAPHS

#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C

