

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH60M 1204-91655 - Swing Drive

Sample No: LH0243892

Oil Type: LIEBHERR GEAR BASIC 90 LS



#### LIEBHERR EQUIPMENT SOURCE

4100 CHESTNUT AVENUE  
NEWPORT NEWS, VA  
US 23607

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#### SAMPLE INFORMATION

Sample Number	LH0243892	LH0220401	LHMC102853	LHMC76657
Sample Date	22 Feb 2024	04 Oct 2022	08 Mar 2018	10 Nov 2017
Machine Hours	17102	14908	2994	2025
Oil Hours	0	2000	1000	1000
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	ABNORMAL



#### OIL CONDITION

Visc @ 40°C	cSt	219	143	154.1	176.1
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#### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	8	9	2	12
Sodium	ppm	3	2	2	6
Potassium	ppm	2	0	5	11



#### WEAR METALS

Iron	ppm	191	149	67	289
Copper	ppm	277	222	4	128
Lead	ppm	<1	4	<1	0
Tin	ppm	18	11	0	40
Aluminum	ppm	2	4	<1	<1
Chromium	ppm	2	1	<1	2
Molybdenum	ppm	1	<1	0	0
Nickel	ppm	<1	0	<1	<1
Titanium	ppm	<1	0	<1	0
Silver	ppm	0	<1	0	0
Manganese	ppm	2	2	1	2
Vanadium	ppm	<1	0	<1	0



#### ADDITIVES

Calcium	ppm	44	41	53	25
Magnesium	ppm	2	7	5	25
Zinc	ppm	63	52	32	52
Phosphorus	ppm	1505	1881	603	1991
Barium	ppm	<1	0	109	4
Boron	ppm	127	50	2	17

#### Diagnosis

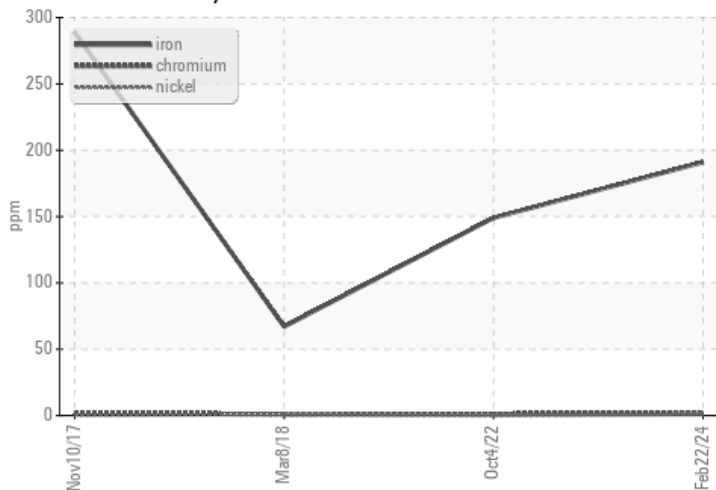
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: LIEBHERRUS  
Unique No: 10914456  
Signed: Don Baldrige  
Report Date: 09 Mar 2024

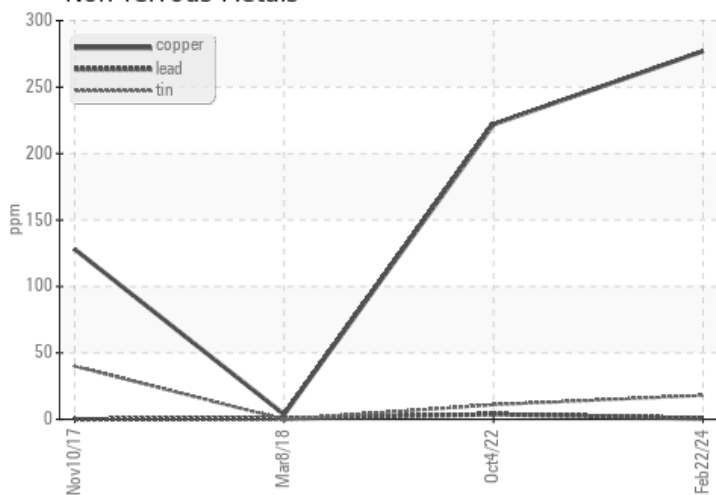


### GRAPHS

#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C

