

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### [[SUPER SALVAGE]] LIEBHERR LH50M 1203-88171 - Swing Drive

Sample No: LH0229454

Oil Type: LIEBHERR GEAR BASIC 90 LS



**LIEBHERR EQUIPMENT SOURCE**  
 6940 OCONNOR CAVE  
 HANOVER, MD  
 US 21076  
 Contact: PETE JARVIS  
 peter.jarvis@liebherr.com  
 T: (410)379-3994  
 F: (410)379-3998



#### SAMPLE INFORMATION

Sample Number	LH0229454	LH0204415	LHMC130265	LHMC132300
Sample Date	25 Sep 2023	05 Oct 2021	15 Apr 2019	15 Apr 2019
Machine Hours	12663	10644	5784	5784
Oil Hours	0	2000	1000	1000
Oil Changed	N/A	Changed	Changed	Changed
Sample Status	ABNORMAL	SEVERE	SEVERE	ABNORMAL



#### OIL CONDITION

Visc @ 40°C	cSt	153	269	181	180
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#### CONTAMINATION

Water	%	0.171	---	0.375	0.209
Silicon	ppm	4	23	24	14
Sodium	ppm	0	3	2	2
Potassium	ppm	1	8	2	16



#### WEAR METALS

Iron	ppm	1254	8610	666	457
Copper	ppm	211	757	115	78
Lead	ppm	0	2	<1	0
Tin	ppm	3	3	0	0
Aluminum	ppm	<1	4	14	9
Chromium	ppm	13	112	6	4
Molybdenum	ppm	1	0	0	0
Nickel	ppm	1	8	1	<1
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	0	<1	0
Manganese	ppm	10	100	5	4
Vanadium	ppm	0	2	0	0



#### ADDITIVES

Calcium	ppm	19	108	40	34
Magnesium	ppm	5	56	0	<1
Zinc	ppm	26	80	36	25
Phosphorus	ppm	969	1633	1794	1911
Barium	ppm	0	4	0	0
Boron	ppm	17	52	3	4

#### Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. Gear wear is indicated. All other component wear rates are normal. There is a trace of moisture present in the oil. The condition of the oil is acceptable for the time in service.

Depot: LIEBHERRMD  
 Unique No: 10672319  
 Signed: Don Baldrige  
 Report Date: 03 Oct 2023

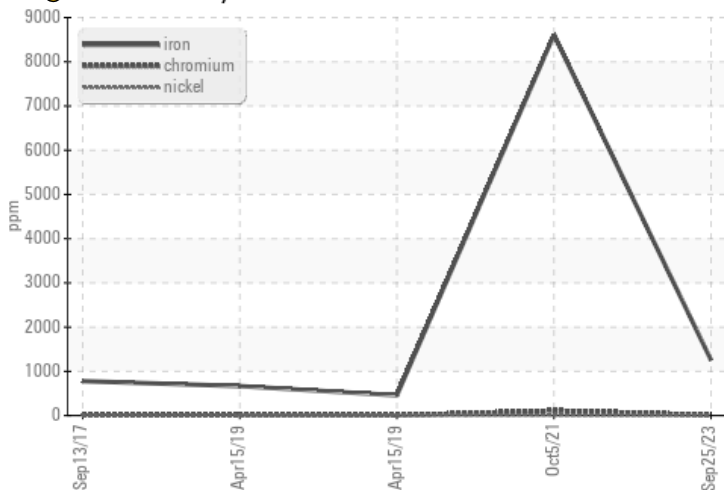
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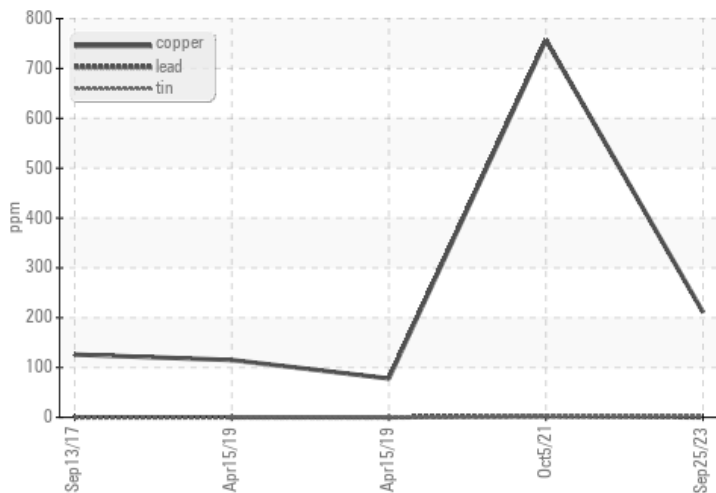


### GRAPHS

#### ● Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C

