

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH60M 117421-1217 - Swing Drive

Sample No: LH0244342

Oil Type: LIEBHERR GEAR BASIC 90 LS



#### SAMPLE INFORMATION

Sample Number	LH0244342	LHMC144492	LH0247841	LH0229343
Sample Date	27 Jun 2023	15 Mar 2023	24 Feb 2023	13 Jun 2022
Machine Hours	4239	3581	3454	1958
Oil Hours	500	126	1000	500
Oil Changed	Changed	Not Changd	Changed	Changed
Sample Status	ABNORMAL	MARGINAL	SEVERE	SEVERE

#### TT & E IRON

1529 WEST GARNER RD  
GARNER, NC  
US 27529  
Contact: MICHAEL STANCIL  
culaterprowler@aol.com  
T: (919)524-4326  
F:



#### OIL CONDITION

Visc @ 40°C	cSt	198	211	268	223
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#### CONTAMINATION

Water	%	0.423	0.149	1.48	1.18
Silicon	ppm	4	1	5	3
Sodium	ppm	0	0	<1	2
Potassium	ppm	1	<1	<1	0



#### WEAR METALS

Iron	ppm	538	292	1183	757
Copper	ppm	55	27	179	52
Lead	ppm	0	0	<1	<1
Tin	ppm	2	<1	7	6
Aluminum	ppm	<1	2	2	2
Chromium	ppm	7	3	13	8
Molybdenum	ppm	<1	<1	<1	<1
Nickel	ppm	1	<1	1	<1
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	<1
Manganese	ppm	5	3	10	6
Vanadium	ppm	0	0	0	0



#### ADDITIVES

Calcium	ppm	5	9	17	36
Magnesium	ppm	0	2	2	3
Zinc	ppm	8	5	18	21
Phosphorus	ppm	2015	2250	2118	2064
Barium	ppm	0	0	0	0
Boron	ppm	12	2	3	13

#### Diagnosis

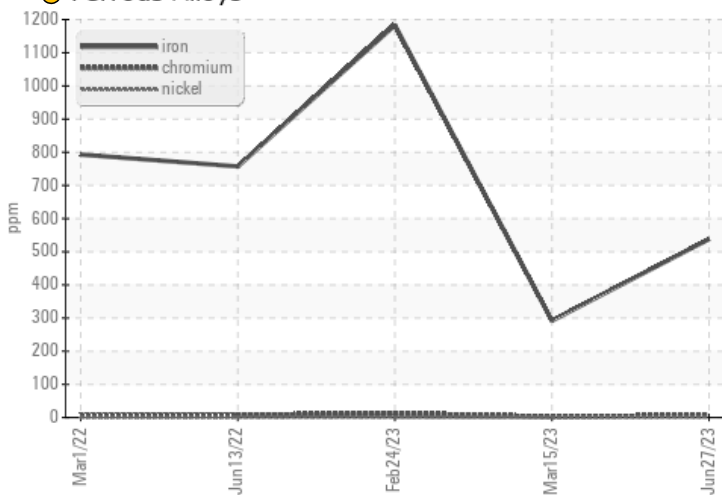
We advise that you check for the source of water entry. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. Gear wear is indicated. There is a moderate concentration of water present in the oil. The condition of the oil is acceptable for the time in service.

Depot: TTENEW  
Unique No: 10561664  
Signed: Sean Felton  
Report Date: 19 Jul 2023

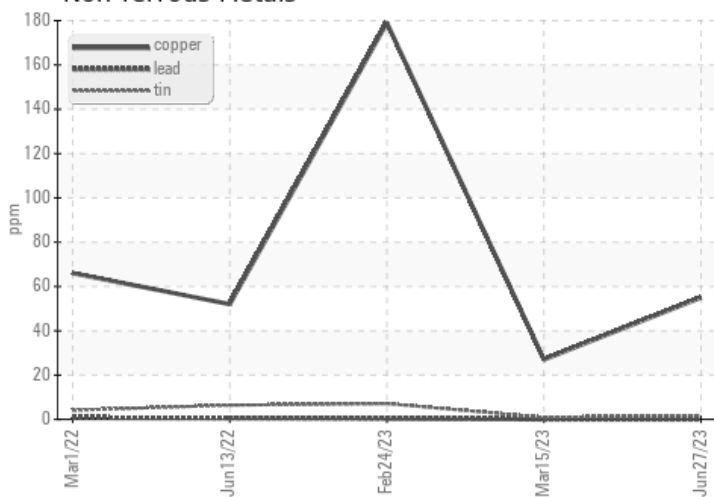


### GRAPHS

#### ● Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C

