

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH60M 1528-98020 - Swing Drive

Sample No: LH0204247

Oil Type: GEAR OIL LS 80W90



**SIMKO ACQUISITIONS LLC**  
 1901 N 6TH ST  
 SUPERIOR, WI  
 US 54880-1061  
 Contact: STEVE K  
 stevek@simkosuperior.com  
 T:  
 F:



#### SAMPLE INFORMATION

Sample Number	LH0204247	LH0200227	LH0204232	LH0204228
Sample Date	22 Aug 2023	08 Mar 2023	23 Mar 2022	15 Feb 2022
Machine Hours	5815	7645	5902	5832
Oil Hours	500	0	0	0
Oil Changed	N/A	N/A	Changed	Not Changd
Sample Status	ABNORMAL	SEVERE	SEVERE	SEVERE



#### OIL CONDITION

Visc @ 40°C	cSt	142	181	240	252



#### CONTAMINATION

Water	%	---	0.315	2.22	0.940
Silicon	ppm	16	7	4	5
Sodium	ppm	3	2	4	5
Potassium	ppm	3	<1	0	3



#### WEAR METALS

Iron	ppm	518	1290	641	861
Copper	ppm	316	778	228	321
Lead	ppm	2	0	2	0
Tin	ppm	10	25	4	4
Aluminum	ppm	1	3	2	1
Chromium	ppm	4	13	7	7
Molybdenum	ppm	2	3	1	1
Nickel	ppm	1	5	3	3
Titanium	ppm	0	<1	<1	<1
Silver	ppm	0	<1	6	0
Manganese	ppm	3	8	5	5
Vanadium	ppm	0	<1	0	0



#### ADDITIVES

Calcium	ppm	80	42	46	42
Magnesium	ppm	13	8	10	12
Zinc	ppm	68	65	52	62
Phosphorus	ppm	823	1455	2287	2587
Barium	ppm	0	<1	0	0
Boron	ppm	6	10	14	29

#### Diagnosis

We advise that you check all areas where dirt can enter the system. We recommend an early resample to monitor this condition. Bearing and/or gear wear is indicated. Elemental level of silicon (Si) above normal indicating ingress of dirt/seal material. The condition of the oil is acceptable for the time in service.

Depot: SIMSUP  
 Unique No: 10660476  
 Signed: Doug Bogart  
 Report Date: 02 Oct 2023

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### GRAPHS

