

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH60M 1528-98020 - Rear Left Wheel Hub

Sample No: LH0204245

Oil Type: LIEBHERR GEAR BASIC 90 LS



SIMKO ACQUISITIONS LLC
 1901 N 6TH ST
 SUPERIOR, WI
 US 54880-1061
 Contact: Service Manager



SAMPLE INFORMATION

Sample Number	LH0204245	LH0204225	---	---
Sample Date	22 Aug 2023	15 Feb 2022	---	---
Machine Hours	5815	5832	---	---
Oil Hours	0	0	---	---
Oil Changed	N/A	Not Changd	---	---
Sample Status	SEVERE	ABNORMAL	---	---



OIL CONDITION

Visc @ 40°C	cSt	● 197	● 192	---	---
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CONTAMINATION

Water	%	● 0.150	---	---	---
Silicon	ppm	● 1107	● 127	---	---
Sodium	ppm	● 42	● 5	---	---
Potassium	ppm	● 58	● 6	---	---



WEAR METALS

Iron	ppm	● 3020	● 483	---	---
Copper	ppm	● 259	● 110	---	---
Lead	ppm	● 7	● 1	---	---
Tin	ppm	● 16	● 4	---	---
Aluminum	ppm	● 179	● 21	---	---
Chromium	ppm	● 38	● 6	---	---
Molybdenum	ppm	● 4	● 1	---	---
Nickel	ppm	● 23	● 3	---	---
Titanium	ppm	● 19	● 2	---	---
Silver	ppm	● 0	● 16	---	---
Manganese	ppm	● 41	● 11	---	---
Vanadium	ppm	● 2	<1	---	---



ADDITIVES

Calcium	ppm	● 906	● 149	---	---
Magnesium	ppm	● 92	23	---	---
Zinc	ppm	● 144	● 91	---	---
Phosphorus	ppm	● 2018	● 2051	---	---
Barium	ppm	● <1	● 0	---	---
Boron	ppm	● 12	● 7	---	---

T:
F:

Diagnosis

We advise that you check all areas where dirt can enter the system. We recommend changing the oil and filter if you have not already done so. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Gear wear is indicated. Bearing and/or bushing wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The water content is negligible. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot: SIMSUP
 Unique No: 10660475
 Signed: Sean Felton
 Report Date: 26 Sep 2023



GRAPHS

