

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH40C 117763-1527 - Swing Drive

Sample No: LH0270261

Oil Type: GEAR OIL SAE 80W90



SAMPLE INFORMATION

Sample Number	LH0270261	LH0247011	LH0227586	LH
Sample Date	25 Sep 2023	16 Dec 2022	09 Mar 2022	09 Jul 2021
Machine Hours	5976	5012	3939	2893
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ABNORMAL	NORMAL	NORMAL	NORMAL

MOFFATT SCRAP IRON & METAL INC.
 9620 GUELPH LINE
 CAMPBELLVILLE, ON
 CA L0P 1B0
 Contact: Paul Brochu
 maintenance@moffatsscrapiron.ca
 T: (905)854-2792
 F: (905)854-1225



OIL CONDITION

Visc @ 40°C	cSt	102	104	101	99.7
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CONTAMINATION

Water	%	0.327	---	---	---
Silicon	ppm	6	4	1	2
Sodium	ppm	1	<1	<1	0
Potassium	ppm	0	<1	<1	<1



WEAR METALS

PQ		0	---	---	---
Iron	ppm	1297	277	260	288
Copper	ppm	195	23	32	30
Lead	ppm	7	<1	<1	<1
Tin	ppm	1	<1	<1	<1
Aluminum	ppm	<1	0	0	0
Chromium	ppm	7	3	3	3
Molybdenum	ppm	0	0	<1	<1
Nickel	ppm	<1	<1	<1	<1
Titanium	ppm	0	0	0	0
Silver	ppm	<1	0	0	0
Manganese	ppm	10	2	2	2
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	11	18	8	12
Magnesium	ppm	2	2	2	2
Zinc	ppm	19	13	11	10
Phosphorus	ppm	1240	1332	1304	1345
Barium	ppm	1	0	0	<1
Boron	ppm	141	313	301	320

Diagnosis

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Copper, iron and lead ppm levels are abnormal. A sharp increase in the copper level is noted. Bearing and/or bushing wear is indicated. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. There is a moderate concentration of water present in the oil. Viscosity of sample indicates oil is within SAE 75W90 range, advise investigate. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot: MOFMOF
 Unique No: 5646356
 Signed: Kevin Marson
 Report Date: 27 Sep 2023

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GRAPHS

