

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR PR766 027906-1681 - Right Final Drive

Sample No: LH0254477

Oil Type: GEAR OIL SAE 80W140



HEAVY MACHINES INC.
 3930 EAST RAINES RD
 MEMPHIS, TN
 US 38118
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Sample Information

Sample Number	LH0254477	LH0254552	LH0254258	---
Sample Date	01 May 2024	03 Apr 2024	07 Mar 2024	---
Machine Hours	2148	1518	882	---
Oil Hours	2148	1518	882	---
Oil Changed	Changed	Not Changd	Not Changd	---
Sample Status	SEVERE	ABNORMAL	ABNORMAL	---



Oil Condition

Visc @ 40°C	cSt	● 293	● 295	● 298	---
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Contamination

Water	%	NEG	NEG	NEG	---
Silicon	ppm	● 11	● 13	● 12	---
Sodium	ppm	● 3	● 3	● 2	---
Potassium	ppm	● 2	● <1	● 2	---



Wear Metals

Iron	ppm	● 102	● 87	● 69	---
Copper	ppm	● 423	● 234	● 86	---
Lead	ppm	● <1	● 0	● <1	---
Tin	ppm	● 14	● 7	● 2	---
Aluminum	ppm	● 1	● 1	● 2	---
Chromium	ppm	● <1	● <1	● 1	---
Molybdenum	ppm	● 2	● 2	● 3	---
Nickel	ppm	● 0	● 0	● <1	---
Titanium	ppm	0	<1	<1	---
Silver	ppm	0	0	0	---
Manganese	ppm	● 2	● 2	● 2	---
Vanadium	ppm	0	0	<1	---



Additives

Calcium	ppm	● 47	● 34	● 41	---
Magnesium	ppm	● 4	● 2	● 2	---
Zinc	ppm	● 62	● 42	● 40	---
Phosphorus	ppm	● 1203	● 1154	● 1065	---
Barium	ppm	● 74	● 78	● 86	---
Boron	ppm	● 2	● 2	● 3	---

Diagnosis

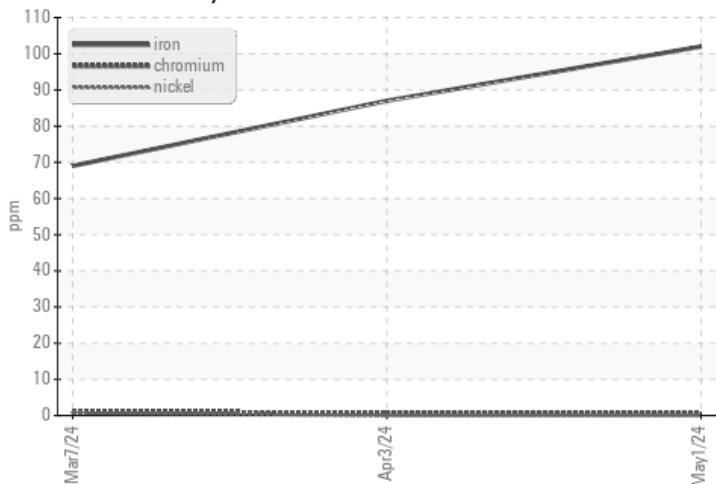
Oil and filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Bearing and/or bushing wear is indicated. There is no indication of any contamination in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot: LEC0051
 Unique No: 11021998
 Signed: Sean Felton
 Report Date: 14 May 2024

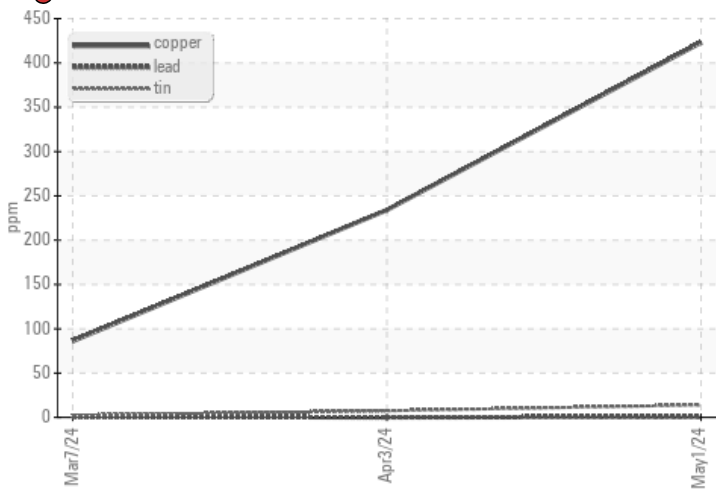


Graphs

Ferrous Alloys



● Non-ferrous Metals



Viscosity @ 40°C

