

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR PR766 027906-1681 - Left Final Drive

Sample No: LH0264291

Oil Type: GEAR OIL SAE 90W140



Sample Information

Sample Number	LH0264291	LH0254478	LH0254553	LH0254254
Sample Date	31 May 2024	01 May 2024	03 Apr 2024	07 Mar 2024
Machine Hours	2848	2148	1518	882
Oil Hours	698	2148	1518	882
Oil Changed	Not Changd	Changed	Not Changd	Not Changd
Sample Status	SEVERE	SEVERE	ABNORMAL	ABNORMAL

HEAVY MACHINES INC.
 3930 EAST RAINES RD
 MEMPHIS, TN
 US 38118
 Contact: J. DAVIS
 JDAVIS@HEAVY.LLC.COM
 T:
 F: (901)260-2245



Oil Condition

Visc @ 40°C	cSt	344	271	289	292
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Contamination

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	4	11	38	11
Sodium	ppm	1	3	3	2
Potassium	ppm	<1	2	<1	2



Wear Metals

Iron	ppm	34	109	100	54
Copper	ppm	460	1031	678	144
Lead	ppm	<1	0	0	<1
Tin	ppm	11	32	22	4
Aluminum	ppm	2	<1	5	2
Chromium	ppm	<1	<1	1	1
Molybdenum	ppm	1	<1	1	2
Nickel	ppm	<1	0	0	<1
Titanium	ppm	<1	0	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	2	2	2
Vanadium	ppm	0	0	0	<1



Additives

Calcium	ppm	7	69	34	41
Magnesium	ppm	4	3	2	2
Zinc	ppm	25	83	48	39
Phosphorus	ppm	983	1142	1140	1057
Barium	ppm	13	73	75	85
Boron	ppm	2	2	6	3

Diagnosis

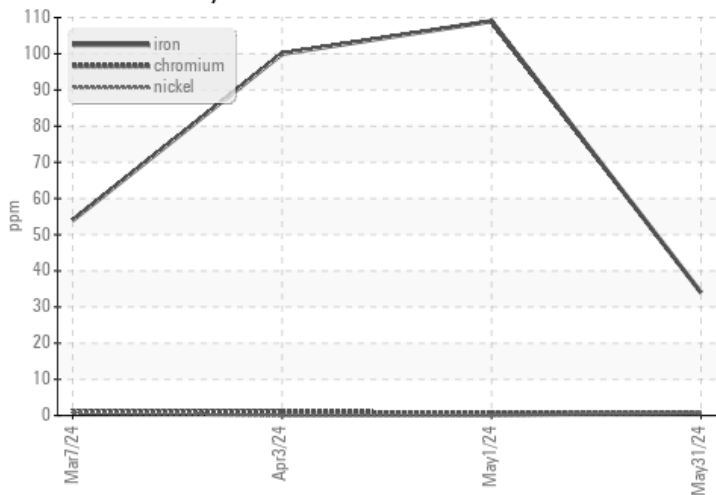
We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. The copper level is severe for time on oil. Bearing and/or bushing wear is indicated. There is no indication 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: 11084982
 Signed: Don Baldrige
 Report Date: 19 Jun 2024

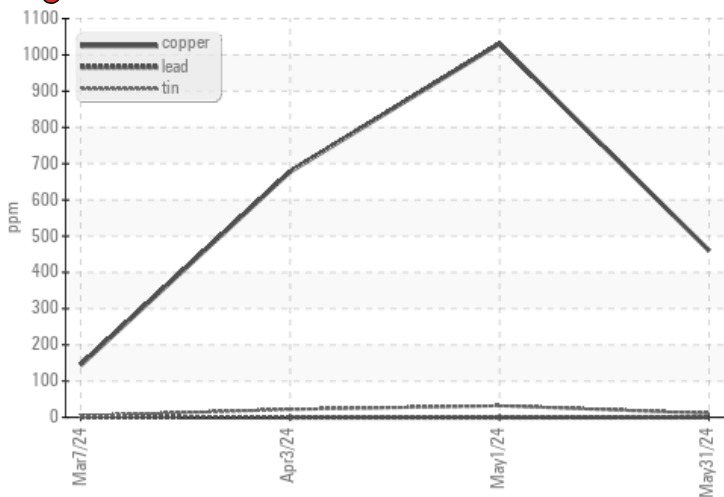


Graphs

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

