

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH30M 121854-1253 - Pump Drive

Sample No: LH0272743

Oil Type: GEAR OIL LS 80W90



AMERICAN STATE EQUIPMENT CO.
 2400 NORTH 14TH AVENUE
 WAUSAU, WI
 US 54401
 Contact: CHRIS BARTNIK
 cbartnik@amstate.com
 T: (715)675-6900
 F: (715)675-9748



SAMPLE INFORMATION

Sample Number	LH0272743	LH0272578	LH0264399	LH0254776
Sample Date	02 Jan 2024	27 Oct 2023	04 Aug 2023	02 Jun 2023
Machine Hours	6976	6481	6007	5547
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	SEVERE	NORMAL	NORMAL	NORMAL



OIL CONDITION

Visc @ 40°C	cSt	127	117	118	121
		●	●	●	●



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	● <1	● <1	● <1	● 0
Sodium	ppm	● <1	● 1	● 2	● <1
Potassium	ppm	● <1	● 0	● 2	● 1



WEAR METALS

Iron	ppm	● 639	● 7	● 13	● 12
Copper	ppm	● 78	● 0	● 2	● <1
Lead	ppm	● <1	● 0	● 0	● 0
Tin	ppm	● 3	● 0	● 0	● 0
Aluminum	ppm	● 0	● 0	● 0	● 0
Chromium	ppm	● 4	● 0	● 0	● 0
Molybdenum	ppm	● 0	● 0	● 0	● <1
Nickel	ppm	● 0	● 0	● 0	● 0
Titanium	ppm	0	0	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	● 4	● 0	● <1	● <1
Vanadium	ppm	0	0	<1	0



ADDITIVES

Calcium	ppm	● 26	● 58	● 72	● 87
Magnesium	ppm	● 3	● 2	● 9	● 7
Zinc	ppm	● 45	● 38	● 33	● 57
Phosphorus	ppm	● 754	● 822	786	817
Barium	ppm	● <1	● 0	● 0	● 0
Boron	ppm	7	0	● 2	● 5

Diagnosis

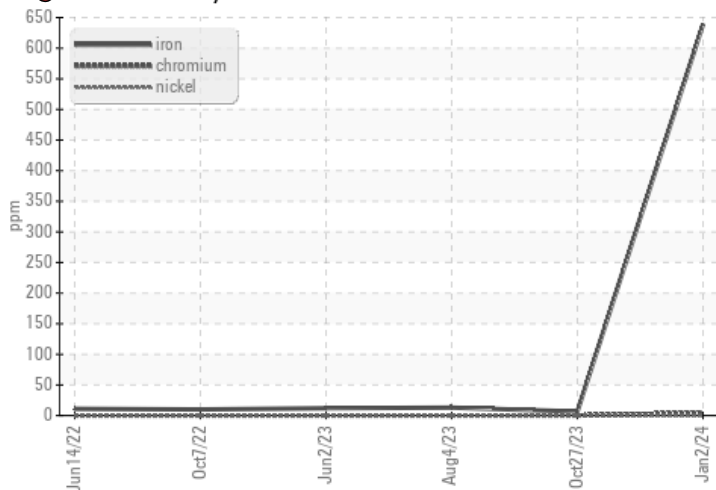
The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. A sharp increase in the iron and copper levels is noted. Gear wear is indicated. Bearing and/or bushing wear is indicated. There is no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

Depot: LEC0008
 Unique No: 10830290
 Signed: Don Baldrige
 Report Date: 15 Jan 2024

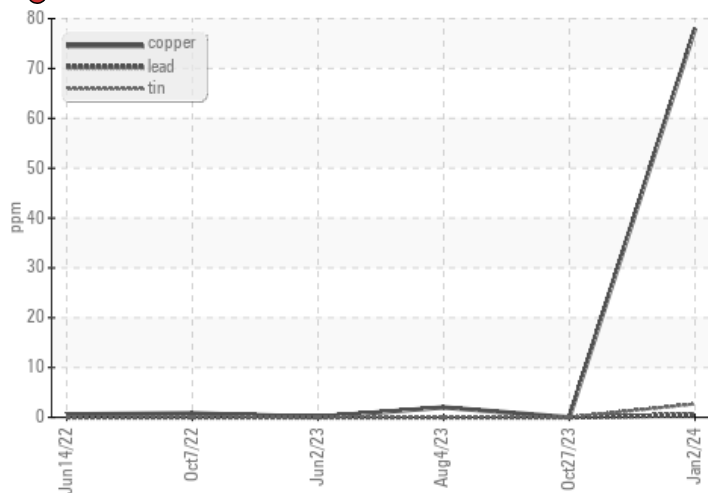


GRAPHS

● Ferrous Alloys



● Non-ferrous Metals



Viscosity @ 40°C

