

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50 1216-121548 - Rear Left Wheel Hub

Sample No: LH0267188

Oil Type: GEAR OIL SAE 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	LH0267188	LH0243393	LH0263858	LH0236122
Sample Date	25 Apr 2024	05 Oct 2023	18 Jul 2023	20 Jan 2023
Machine Hours	4279	2969	2422	1172
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL



Oil Condition

Visc @ 40°C	cSt	120	122	129	131
		●	●	●	●



Contamination

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	● 3	● <1	● 2	● 4
Sodium	ppm	● 0	● 2	● 4	● <1
Potassium	ppm	● 2	● 0	● 0	● 2



Wear Metals

Iron	ppm	● 16	● 8	● 22	● 26
Copper	ppm	● 3	● 2	● 7	● 7
Lead	ppm	● 1	● 0	● 0	● 0
Tin	ppm	● <1	● 0	● 0	● 0
Aluminum	ppm	● <1	● 0	● <1	● 0
Chromium	ppm	● <1	● 0	● 0	● <1
Molybdenum	ppm	● 1	● 0	● <1	● <1
Nickel	ppm	● <1	● 0	● 0	● 0
Titanium	ppm	● <1	● <1	● 0	● 0
Silver	ppm	● 0	● 0	● 0	● 0
Manganese	ppm	● <1	● 0	● <1	● <1
Vanadium	ppm	● <1	● 0	● 0	● 0



Additives

Calcium	ppm	● 47	● 43	● 39	61
Magnesium	ppm	● 4	● 2	● 8	5
Zinc	ppm	● 19	● 11	● 27	33
Phosphorus	ppm	● 823	● 866	● 842	978
Barium	ppm	● 0	● 0	● 0	0
Boron	ppm	● <1	● <1	● 2	6

Diagnosis

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL SAE 80W90. Please confirm.

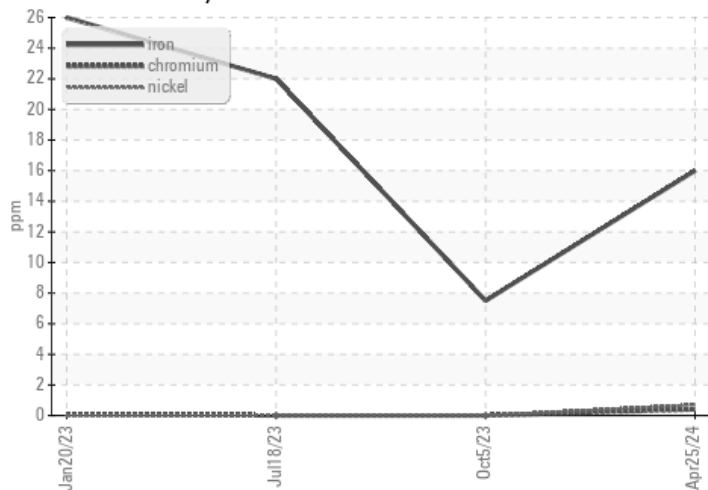
All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: LEC0008
 Unique No: 11019230
 Signed: Wes Davis
 Report Date: 10 May 2024

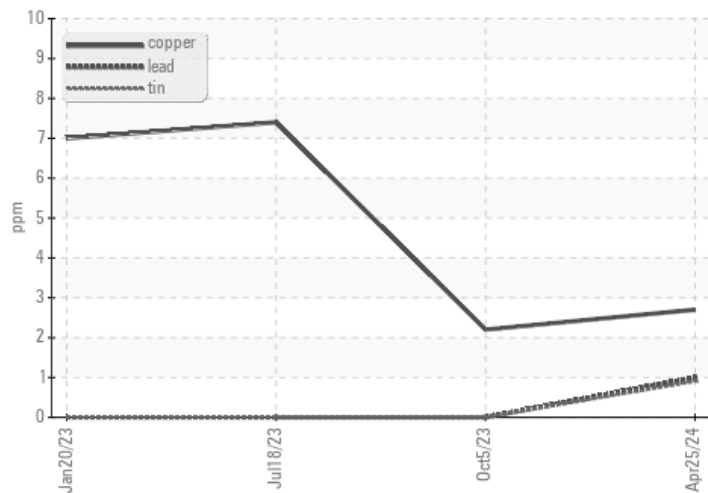


Graphs

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

