

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50M 1216-108671 - Front Differential

Sample No: LH0258755

Oil Type: GEAR OIL SAE 80W90



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SAMPLE INFORMATION

Sample Number	LH0258755	LH0263996	LH0243414	LH0254782
Sample Date	23 Feb 2024	14 Dec 2023	05 Sep 2023	12 Apr 2023
Machine Hours	20036	19125	17864	16979
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL



OIL CONDITION

Visc @ 40°C	cSt	119	121	126	138
		●	●	●	●



CONTAMINATION

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



WEAR METALS

Iron	ppm	● 0	● 0	● 2	● 2
Copper	ppm	● 0	● <1	● <1	● 1
Lead	ppm	● 0	● 0	● 0	● 0
Tin	ppm	● <1	● 0	● 0	● 0
Aluminum	ppm	● 0	● 0	● 0	● 0
Chromium	ppm	● 0	● 0	● 0	● 0
Molybdenum	ppm	● 0	● 0	● 0	● <1
Nickel	ppm	● <1	● 0	● 0	● 0
Titanium	ppm	● 0	● <1	● 1	● 0
Silver	ppm	● 0	● 0	● 0	● 0
Manganese	ppm	● <1	● <1	● 0	● <1
Vanadium	ppm	● 0	● 0	● 0	● <1



ADDITIVES

Calcium	ppm	● 35	● 43	● 46	● 46
Magnesium	ppm	● 5	● 13	● 18	● 7
Zinc	ppm	● 15	● 22	● 22	● 20
Phosphorus	ppm	● 824	● 843	● 619	● 702
Barium	ppm	● 0	● 0	● 0	● 0
Boron	ppm	● 0	● <1	● 7	● 8

Diagnosis

Resample at the next service interval to monitor. 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: 10915875
 Signed: Jonathan Hester
 Report Date: 11 Mar 2024

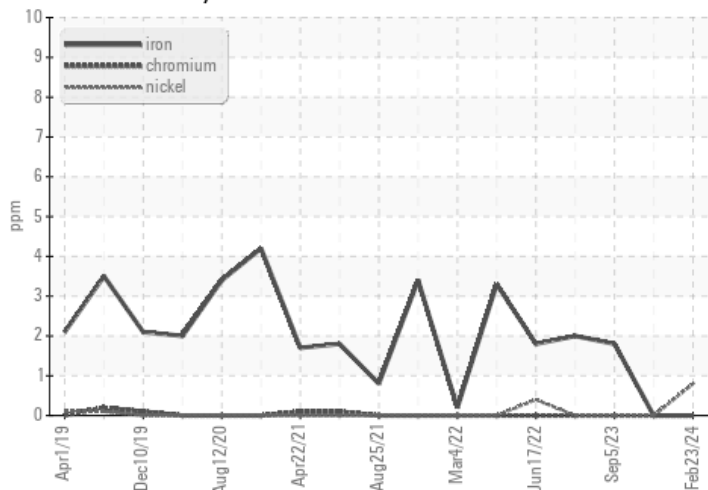
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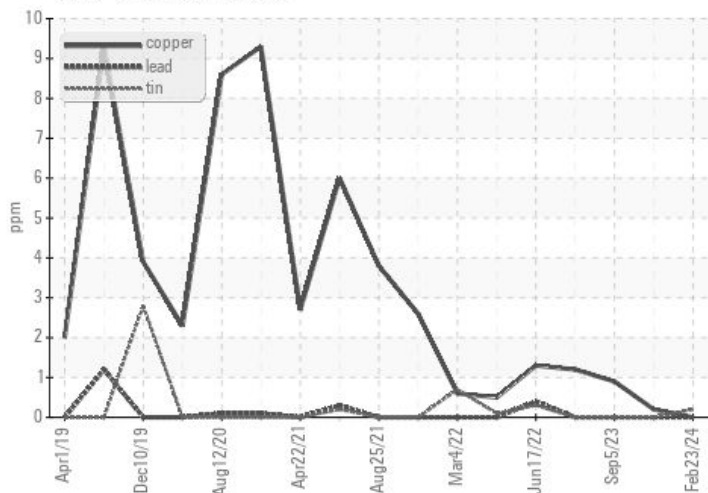


GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

