

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH60M 121879-1217 - Diesel Engine

Sample No: LH0268869

Oil Type: LIEBHERR MOTOROIL 5W30



SAMPLE INFORMATION

Sample Number	LH0268869	LH0173634	---	---
Sample Date	27 Feb 2024	29 Mar 2022	---	---
Machine Hours	7442	3095	---	---
Oil Hours	0	2000	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	NORMAL	NORMAL	---	---

LIEBHERR EQUIPMENT SOURCE

4100 CHESTNUT AVENUE
NEWPORT NEWS, VA
US 23607

Contact: LUKE APPLEBY
Lucas.Appleby@liebherr.com

T:
F: (757)298-8700



OIL CONDITION

Visc @ 100°C	cSt	11.4	11.6	---	---
Base Number (BN)	mg KOH/g	8.8	10.4	---	---
Oxidation (PA)	%	98	91	---	---



CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	0.1	0.1	---	---
Nitration (PA)	%	175	167	---	---
Sulfation (PA)	%	65	64	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	7	7	---	---
Sodium	ppm	3	<1	---	---
Potassium	ppm	10	10	---	---



WEAR METALS

Iron	ppm	27	31	---	---
Copper	ppm	3	26	---	---
Lead	ppm	6	5	---	---
Tin	ppm	<1	<1	---	---
Aluminum	ppm	7	5	---	---
Chromium	ppm	1	2	---	---
Molybdenum	ppm	<1	2	---	---
Nickel	ppm	0	0	---	---
Titanium	ppm	0	<1	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	<1	<1	---	---
Vanadium	ppm	<1	0	---	---



ADDITIVES

Calcium	ppm	4396	4652	---	---
Magnesium	ppm	18	28	---	---
Zinc	ppm	1149	1296	---	---
Phosphorus	ppm	960	1111	---	---
Barium	ppm	<1	0	---	---
Boron	ppm	202	201	---	---

Diagnosis

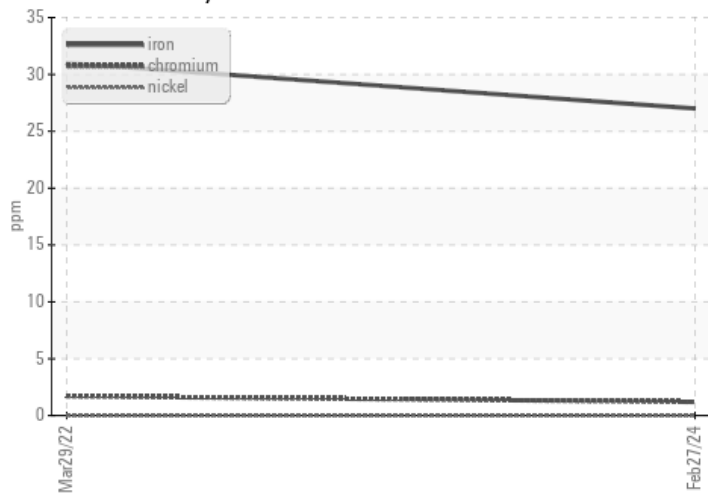
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Depot: LIEBHERRUS
Unique No: 10915369
Signed: Don Baldrige
Report Date: 10 Mar 2024

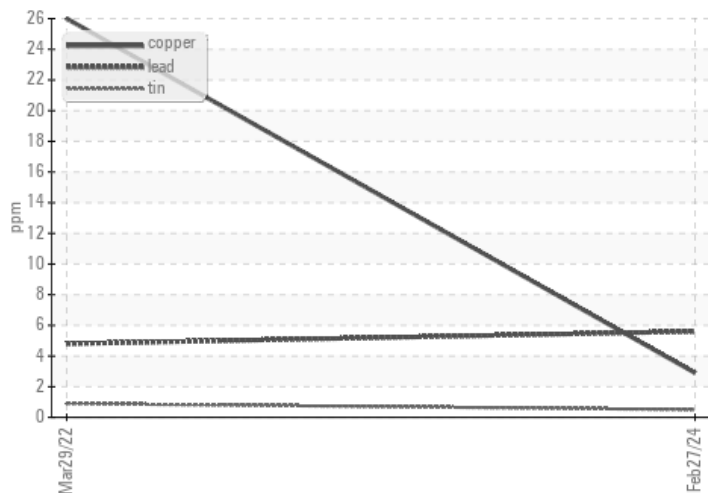


GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

