

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH60M 111993-1217 - Diesel Engine

Sample No: LH0236570
 Oil Type: MOBIL 15W40



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SAMPLE INFORMATION

Sample Number	LH0236570	LH0236571	---	---
Sample Date	27 Feb 2023	20 Feb 2023	---	---
Machine Hours	6500	6200	---	---
Oil Hours	300	500	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	NORMAL	SEVERE	---	---



OIL CONDITION

Visc @ 100°C	cSt	13.4	3.7	---	---
Base Number (BN)	mg KOH/g	7.6	5.6	---	---
Oxidation (PA)	%	51	34	---	---



CONTAMINATION

Soot %	%	0.1	0.1	---	---
Nitration (PA)	%	69	59	---	---
Sulfation (PA)	%	49	39	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	0.6	55.3	---	---
Silicon	ppm	8	7	---	---
Sodium	ppm	6	1	---	---
Potassium	ppm	15	5	---	---



WEAR METALS

Iron	ppm	8	8	---	---
Copper	ppm	8	1	---	---
Lead	ppm	<1	0	---	---
Tin	ppm	1	0	---	---
Aluminum	ppm	2	5	---	---
Chromium	ppm	<1	1	---	---
Molybdenum	ppm	5	1	---	---
Nickel	ppm	0	0	---	---
Titanium	ppm	<1	0	---	---
Silver	ppm	<1	0	---	---
Manganese	ppm	<1	<1	---	---
Vanadium	ppm	0	0	---	---



ADDITIVES

Calcium	ppm	1979	1070	---	---
Magnesium	ppm	281	8	---	---
Zinc	ppm	1055	565	---	---
Phosphorus	ppm	862	472	---	---
Barium	ppm	12	<1	---	---
Boron	ppm	51	32	---	---

Diagnosis

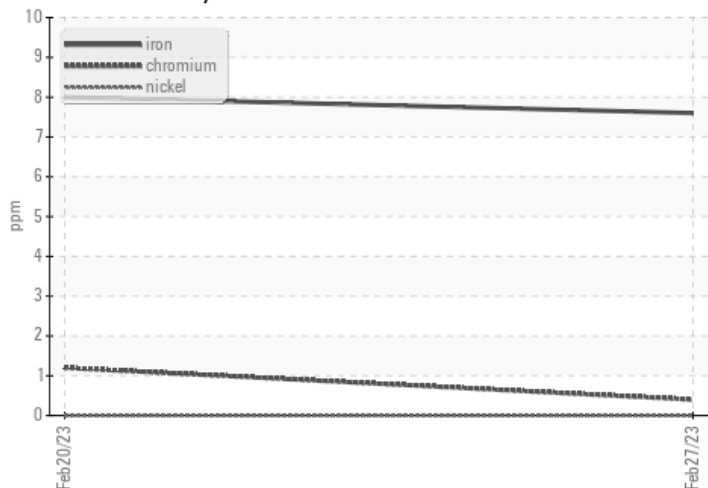
Resample at the next service interval to monitor. All component wear rates are normal. Fuel content negligible. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Depot: LEC0052
 Unique No: 10374154
 Signed: Jonathan Hester
 Report Date: 16 Mar 2023

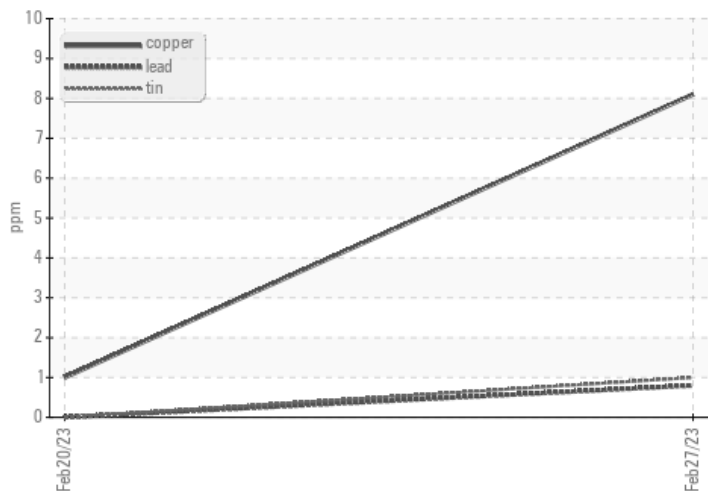


GRAPHS

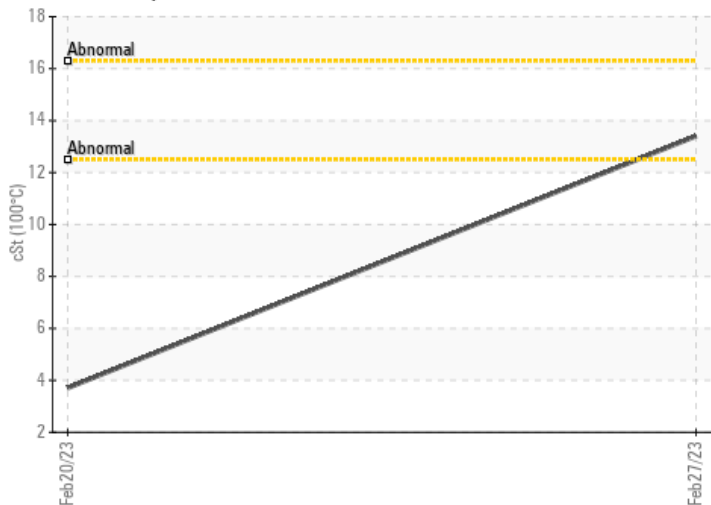
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

