

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH40M 159572-1215 - Diesel Engine

Sample No: LH0268000

Oil Type: LIEBHERR MOTOROIL 5W-30 LOW ASH



HEAVY MACHINES INC
 825 31ST STREET NORTH
 BIRMINGHAM, AL
 US 35203
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Sample Information

Sample Number	LH0268000	---	---	---
Sample Date	18 May 2024	---	---	---
Machine Hours	194	---	---	---
Oil Hours	194	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	NORMAL	---	---	---



Oil Condition

Visc @ 100°C	cSt	● 11.9	---	---	---
Base Number (BN)	mg KOH/g	● 6.2	---	---	---
Oxidation (PA)	%	192	---	---	---



Contamination

Water	%	NEG	---	---	---
Soot %	%	● 0.1	---	---	---
Nitration (PA)	%	79	---	---	---
Sulfation (PA)	%	106	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	● 8	---	---	---
Sodium	ppm	● 2	---	---	---
Potassium	ppm	● 2	---	---	---



Wear Metals

Iron	ppm	● 6	---	---	---
Copper	ppm	● 20	---	---	---
Lead	ppm	● 2	---	---	---
Tin	ppm	● <1	---	---	---
Aluminum	ppm	● 3	---	---	---
Chromium	ppm	● <1	---	---	---
Molybdenum	ppm	● 44	---	---	---
Nickel	ppm	● 0	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	● 0	---	---	---
Manganese	ppm	● 1	---	---	---
Vanadium	ppm	0	---	---	---



Additives

Calcium	ppm	● 1307	---	---	---
Magnesium	ppm	● 882	---	---	---
Zinc	ppm	● 873	---	---	---
Phosphorus	ppm	● 756	---	---	---
Barium	ppm	● 0	---	---	---
Boron	ppm	● 145	---	---	---

Diagnosis

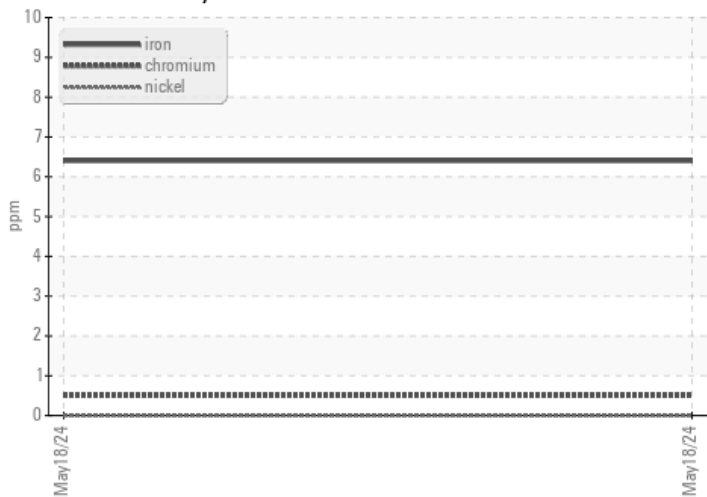
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Depot: HEABIRLH
Unique No: 11044028
Signed: Don Baldrige
Report Date: 23 May 2024

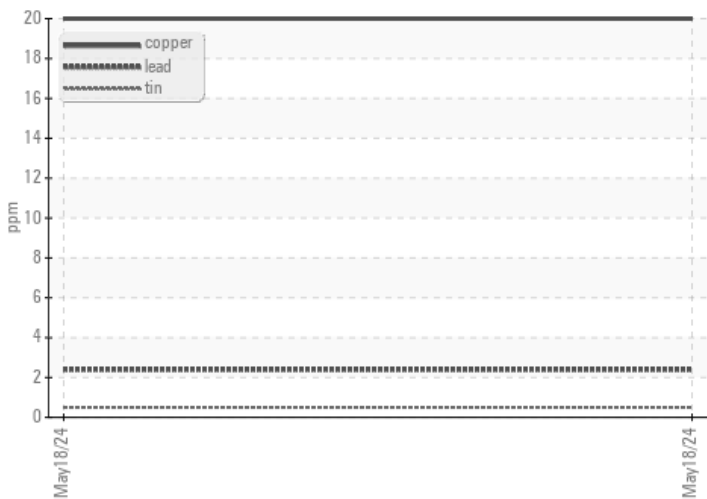


Graphs

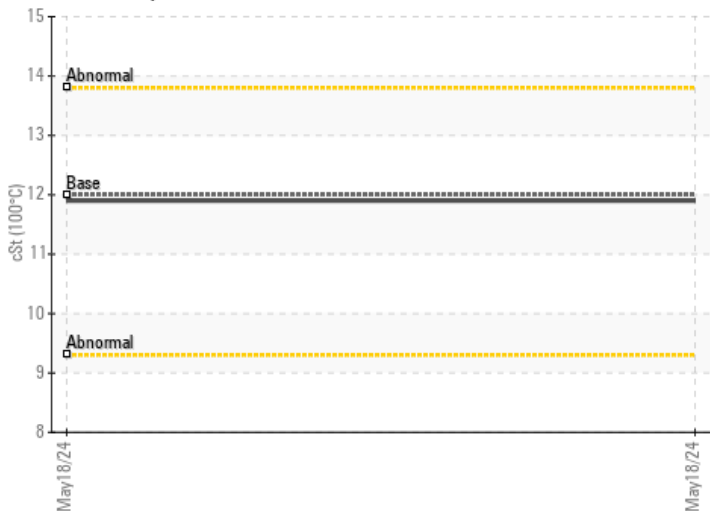
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

