LIEBHERR
CONSTRUCTION EQUIPMENT

LIEBHERR LTM1070-4.2 060759 - Diesel Engine

Sample No: LH0259059

Oil Type: LIEBHERR MOTOROIL 10W-40

SAMPLE INFORMATION

Sample Number		**LH0259059**	---	---	---
Sample Date		**23 Jan 2024**	---	---	---
Machine Hours		**0**	---	---	---
Oil Hours		**0**	---	---	---
Oil Changed		**Changed**	---	---	---
Sample Status		**ATTENTION**	---	---	---

OIL CONDITION

Visc @ 100°C	cSt	**10.0**	---	---	---
Base Number (BN)	mg KOH/g	**6.1**	---	---	---
Oxidation (PA)	%	**92**	---	---	---

CONTAMINATION

Water	%	**NEG**	---	---	---
Soot %	%	**0.1**	---	---	---
Nitration (PA)	%	**74**	---	---	---
Sulfation (PA)	%	**68**	---	---	---
Glycol	%	**NEG**	---	---	---
Fuel	%	**1.9**	---	---	---
Silicon	ppm	**10**	---	---	---
Sodium	ppm	**5**	---	---	---
Potassium	ppm	**4**	---	---	---

WEAR METALS

Iron	ppm	**10**	---	---	---
Copper	ppm	**10**	---	---	---
Lead	ppm	**5**	---	---	---
Tin	ppm	**2**	---	---	---
Aluminum	ppm	**3**	---	---	---
Chromium	ppm	**<1**	---	---	---
Molybdenum	ppm	**33**	---	---	---
Nickel	ppm	**<1**	---	---	---
Titanium	ppm	**<1**	---	---	---
Silver	ppm	**0**	---	---	---
Manganese	ppm	**<1**	---	---	---
Vanadium	ppm	**<1**	---	---	---

ADDITIVES

Calcium	ppm	**2308**	---	---	---
Magnesium	ppm	**319**	---	---	---
Zinc	ppm	**815**	---	---	---
Phosphorus	ppm	**668**	---	---	---
Barium	ppm	**0**	---	---	---
Boron	ppm	**92**	---	---	---

LIEBHERR USA CO - MOBILE AND CRAWLER CRANES
4100 CHESTNUT AVENUE
NEWPORT NEWS, VA
US 23607
Contact: TERENCE VANDERLENDE
TERENCE.VANDERLENDE@LIEBHERR.COM
T:
F:

Diagnosis

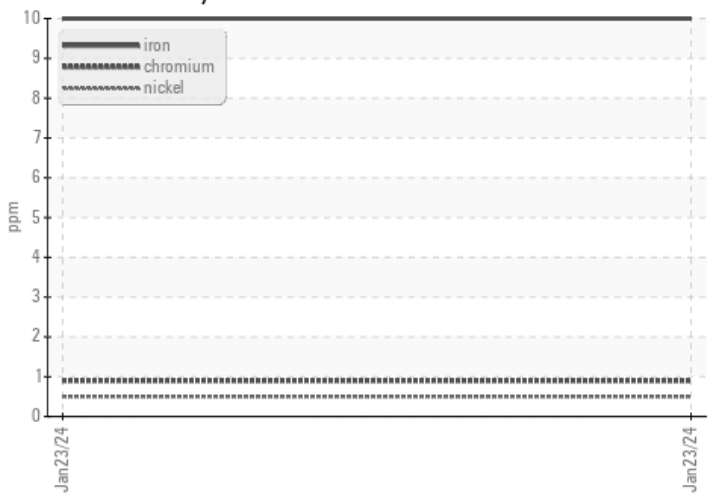
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. Fuel content negligible. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Depot: LIENEW
Unique No: 10847673
Signed: Don Baldridge
Report Date: 29 Jan 2024

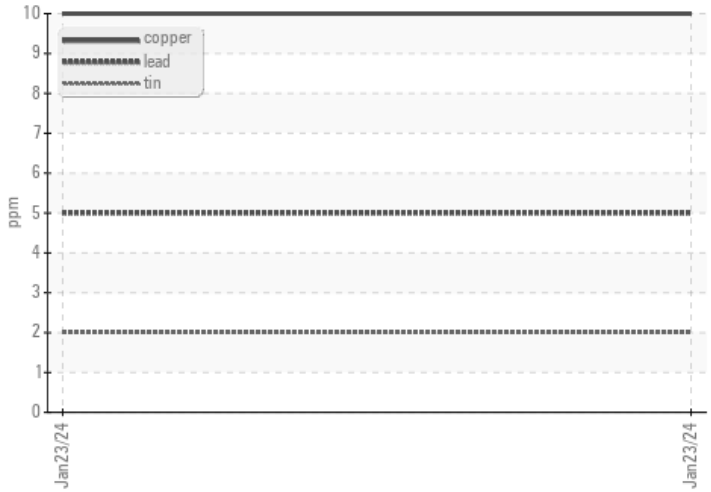
LIEBHERR
CONSTRUCTION EQUIPMENT

GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C

Base Number