

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### [[SMITH EXPORT]] LIEBHERR LH50M 120739-1216 - Diesel Eng

Sample No: LH0254758

Oil Type: {unknown}



#### LIEBHERR EQUIPMENT SOURCE

6940 OCONNOR CAVE  
HANOVER, MD  
US 21076

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#### SAMPLE INFORMATION

Sample Number	LH0254758	---	---	---
Sample Date	01 Mar 2024	---	---	---
Machine Hours	8222	---	---	---
Oil Hours	220	---	---	---
Oil Changed	N/A	---	---	---
Sample Status	ABNORMAL	---	---	---



#### OIL CONDITION

Visc @ 100°C	cSt	11.7	---	---	---
Base Number (BN)	mg KOH/g	7.0	---	---	---
Oxidation (PA)	%	37	---	---	---



#### CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	0.1	---	---	---
Nitration (PA)	%	56	---	---	---
Sulfation (PA)	%	45	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	5.3	---	---	---
Silicon	ppm	10	---	---	---
Sodium	ppm	0	---	---	---
Potassium	ppm	0	---	---	---



#### WEAR METALS

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



#### ADDITIVES

Calcium	ppm	2155	---	---	---
Magnesium	ppm	63	---	---	---
Zinc	ppm	1026	---	---	---
Phosphorus	ppm	862	---	---	---
Barium	ppm	1	---	---	---
Boron	ppm	8	---	---	---

#### Diagnosis

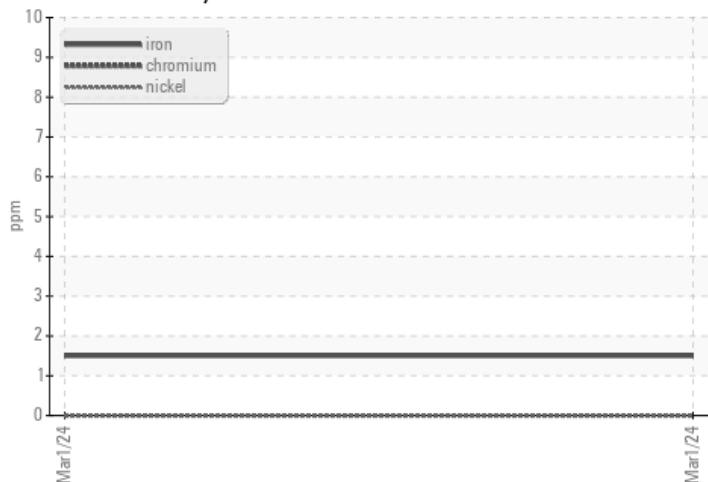
We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Depot: LIEBHERRMD  
Unique No: 10912620  
Signed: Wes Davis  
Report Date: 08 Mar 2024



### GRAPHS

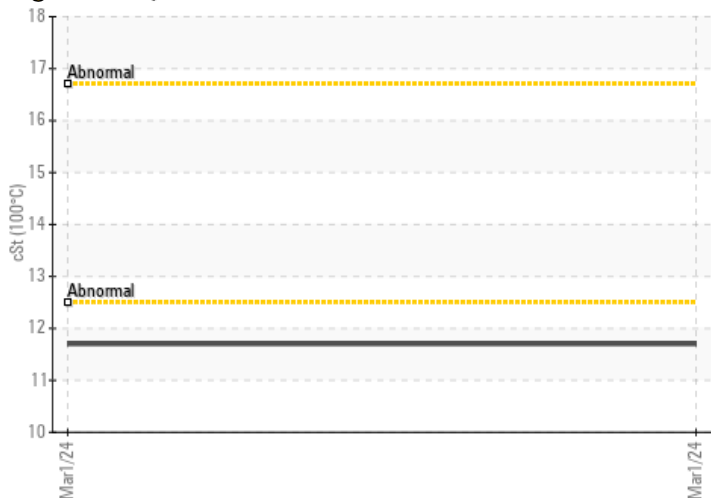
#### Ferrous Alloys



#### Non-ferrous Metals



#### ● Viscosity @ 100°C



#### Base Number

