LIEBHERR
CONSTRUCTION EQUIPMENT

NO UNIT LH0265118 - Diesel Engine

Sample No: LH0265118

Oil Type: NOT GIVEN

SAMPLE INFORMATION

Sample Number	LH0265118	---	---	---
Sample Date	13 Dec 2023	---	---	---
Machine Hours	24504	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Not Changd	---	---	---
Sample Status	ABNORMAL	---	---	---

OIL CONDITION

Visc @ 100°C	cSt	🟢 14.8	---	---	---
Oxidation (PA)	%	52	---	---	---

CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	🟢 0	---	---	---
Nitration (PA)	%	36	---	---	---
Sulfation (PA)	%	48	---	---	---
Glycol	%	🟢 0.0	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	🟢 3	---	---	---
Sodium	ppm	🟢 2	---	---	---
Potassium	ppm	🟢 <1	---	---	---

WEAR METALS

Iron	ppm	🟢 <1	---	---	---
Copper	ppm	🟢 <1	---	---	---
Lead	ppm	🟢 0	---	---	---
Tin	ppm	🟢 0	---	---	---
Aluminum	ppm	🟢 1	---	---	---
Chromium	ppm	🟢 0	---	---	---
Molybdenum	ppm	🟢 56	---	---	---
Nickel	ppm	🟢 <1	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	🟢 <1	---	---	---
Manganese	ppm	0	---	---	---
Vanadium	ppm	0	---	---	---

ADDITIVES

Calcium	ppm	🟢 976	---	---	---
Magnesium	ppm	🟢 952	---	---	---
Zinc	ppm	🟢 1124	---	---	---
Phosphorus	ppm	🟢 972	---	---	---
Barium	ppm	🟢 0	---	---	---
Boron	ppm	🟢 6	---	---	---

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Diagnosis

We advise that you check for the source of water entry. 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. The fluid was not specified, however, a fluid match indicates that this fluid is SAE 40 Diesel Engine Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample.All component wear rates are normal. There is a moderate concentration of water present in the oil. Free water present. Test for glycol is negative. The oil is no longer serviceable due to the presence of contaminants.
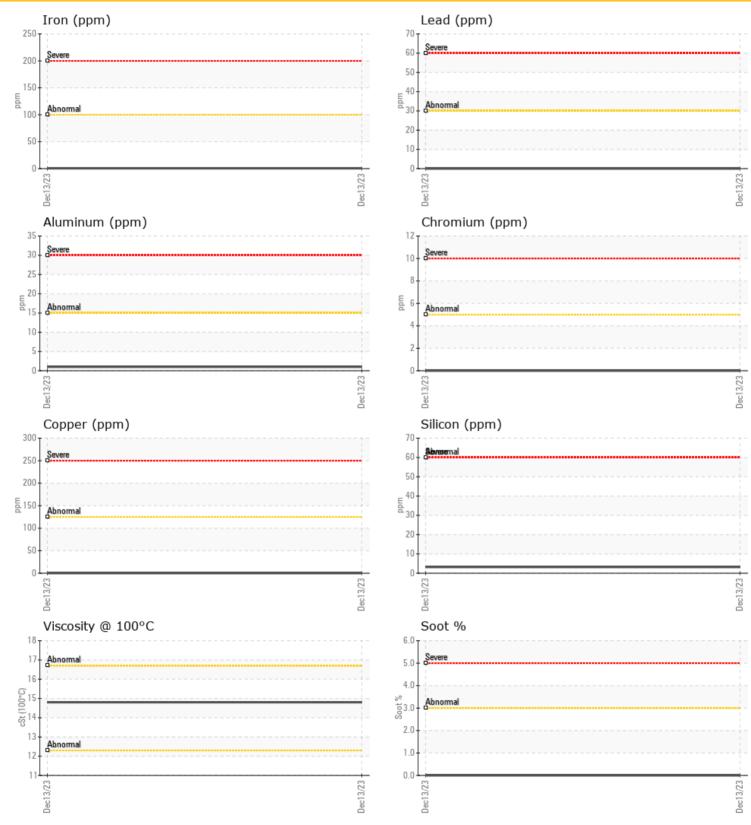
Depot:	LIEFTM
Unique No:	5697389
Signed:	Kevin Marson
Report Date:	22 Dec 2023

⚙ **GRAPHS**

Iron (ppm)

Lead (ppm)

Aluminum (ppm)

Chromium (ppm)

Copper (ppm)

Silicon (ppm)

Viscosity @ 100°C

Soot %