

LIEBHERR

CONSTRUCTION EQUIPMENT



U23.03.90028 - Diesel Engine

Sample No: LH0274474

Oil Type: MOBIL 1 FS 0W40



SAMPLE INFORMATION

Sample Number	LH0274474	---	---	---
Sample Date	08 Mar 2024	---	---	---
Machine Hours	250	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

LIEBHERR CANADA LTD. - REMAN
 1015 SUTTON DRIVE
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 CA L7L 5Z8
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OIL CONDITION

Visc @ 100°C	cSt	10.8	---	---	---
Oxidation (PA)	%	91	---	---	---



CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	0.6	---	---	---
Nitration (PA)	%	57	---	---	---
Sulfation (PA)	%	79	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	5.3	---	---	---
Silicon	ppm	5	---	---	---
Sodium	ppm	14	---	---	---
Potassium	ppm	<1	---	---	---

Diagnosis

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Metal levels are typical for a new component breaking in. There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel 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.



WEAR METALS

Iron	ppm	15	---	---	---
Copper	ppm	18	---	---	---
Lead	ppm	2	---	---	---
Tin	ppm	2	---	---	---
Aluminum	ppm	2	---	---	---
Chromium	ppm	<1	---	---	---
Molybdenum	ppm	2	---	---	---
Nickel	ppm	<1	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	<1	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	1902	---	---	---
Magnesium	ppm	26	---	---	---
Zinc	ppm	917	---	---	---
Phosphorus	ppm	806	---	---	---
Barium	ppm	24	---	---	---
Boron	ppm	28	---	---	---

Depot: REMAN
 Unique No: 5746447
 Signed: Wes Davis
 Report Date: 13 Mar 2024



GRAPHS

