

LIEBHERR

CONSTRUCTION EQUIPMENT



2020.03.2432 - Diesel Engine

Sample No: LH0270457

Oil Type: NOT GIVEN



SAMPLE INFORMATION

Sample Number	LH0270457	---	---	---
Sample Date	03 Aug 2023	---	---	---
Machine Hours	0	---	---	---
Oil Hours	0	---	---	---
Oil Changed	N/A	---	---	---
Sample Status	ABNORMAL	---	---	---

LIEBHERR CANADA LTD. - REMAN
 1015 SUTTON DRIVE
 BURLINGTON, ON
 CA L7L 5Z8
 Contact: Jeff Carter
 jeff.carter@liebherr.com
 T: (905)319-9222
 F: (905)319-6622



OIL CONDITION

Visc @ 100°C	cSt	● 12.8	---	---	---
Oxidation (PA)	%	● 66	---	---	---



CONTAMINATION

Soot %	%	● 0	---	---	---
Nitration (PA)	%	● 73	---	---	---
Sulfation (PA)	%	● 53	---	---	---
Glycol	%	● NEG	---	---	---
Fuel	%	● <1.0	---	---	---
Silicon	ppm	● 9	---	---	---
Sodium	ppm	● 2	---	---	---
Potassium	ppm	● 2	---	---	---



WEAR METALS

Iron	ppm	● 20	---	---	---
Copper	ppm	● 2	---	---	---
Lead	ppm	● <1	---	---	---
Tin	ppm	● 0	---	---	---
Aluminum	ppm	● 19	---	---	---
Chromium	ppm	● 6	---	---	---
Molybdenum	ppm	● 55	---	---	---
Nickel	ppm	● <1	---	---	---
Titanium	ppm	● 0	---	---	---
Silver	ppm	● 0	---	---	---
Manganese	ppm	● <1	---	---	---
Vanadium	ppm	● 0	---	---	---



ADDITIVES

Calcium	ppm	● 966	---	---	---
Magnesium	ppm	● 943	---	---	---
Zinc	ppm	● 1149	---	---	---
Phosphorus	ppm	● 1006	---	---	---
Barium	ppm	● 0	---	---	---
Boron	ppm	● 4	---	---	---

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. Aluminum and chromium ppm levels are abnormal. Ring wear is indicated. Piston wear is indicated. We have assumed that this component is not breaking in (age of component not reported). The water content is negligible. There is no indication of any contamination in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot: REMAN
Unique No: 5619506
Signed: Kevin Marson
Report Date: 08 Aug 2023



GRAPHS

