

LIEBHERR

CONSTRUCTION EQUIPMENT



2023.06.0017 - Diesel Engine

Sample No: LH0278684
 Oil Type: DIESEL ENGINE OIL SAE 10W30



SAMPLE INFORMATION

Sample Number	LH0278684	---	---	---
Sample Date	08 Feb 2024	---	---	---
Machine Hours	0	---	---	---
Oil Hours	0	---	---	---
Oil Changed	N/A	---	---	---
Sample Status	NORMAL	---	---	---

LIEBHERR CANADA LTD. - REMAN
 1015 SUTTON DRIVE
 BURLINGTON, ON
 CA L7L 5Z8
 Contact: Morteza Mahmoudi
 morteza.mahmoudi@liebherr.com
 T: (905)319-9222
 F: (905)319-6622



OIL CONDITION

Visc @ 100°C	cSt	13.3	---	---	---
Oxidation (PA)	%	68	---	---	---



CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	0	---	---	---
Nitration (PA)	%	50	---	---	---
Sulfation (PA)	%	61	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	19	---	---	---
Sodium	ppm	2	---	---	---
Potassium	ppm	6	---	---	---

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within SAE 40 range, advise investigate. The condition of the oil is acceptable for the time in service.



WEAR METALS

Iron	ppm	4	---	---	---
Copper	ppm	23	---	---	---
Lead	ppm	<1	---	---	---
Tin	ppm	<1	---	---	---
Aluminum	ppm	4	---	---	---
Chromium	ppm	0	---	---	---
Molybdenum	ppm	82	---	---	---
Nickel	ppm	<1	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	<1	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	1846	---	---	---
Magnesium	ppm	377	---	---	---
Zinc	ppm	733	---	---	---
Phosphorus	ppm	671	---	---	---
Barium	ppm	4	---	---	---
Boron	ppm	424	---	---	---

Depot: REMAN
 Unique No: 5724044
 Signed: Kevin Marson
 Report Date: 13 Feb 2024



GRAPHS

