

LIEBHERR

CONSTRUCTION EQUIPMENT



2021.16.0875 - Diesel Engine

Sample No: LH0274335

Oil Type: {unknown}



SAMPLE INFORMATION

Sample Number	LH0274335	---	---	---
Sample Date	08 Feb 2024	---	---	---
Machine Hours	0	---	---	---
Oil Hours	0	---	---	---
Oil Changed	N/A	---	---	---
Sample Status	SEVERE	---	---	---

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

Visc @ 100°C	cSt	30.9	---	---	---
Oxidation (PA)	%	185	---	---	---



CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	0.4	---	---	---
Nitration (PA)	%	388	---	---	---
Sulfation (PA)	%	0	---	---	---
Glycol	%	>.70	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	44	---	---	---
Sodium	ppm	2071	---	---	---
Potassium	ppm	291	---	---	---



WEAR METALS

Iron	ppm	26	---	---	---
Copper	ppm	181	---	---	---
Lead	ppm	9	---	---	---
Tin	ppm	1	---	---	---
Aluminum	ppm	8	---	---	---
Chromium	ppm	<1	---	---	---
Molybdenum	ppm	248	---	---	---
Nickel	ppm	1	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	2	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	973	---	---	---
Magnesium	ppm	622	---	---	---
Zinc	ppm	751	---	---	---
Phosphorus	ppm	688	---	---	---
Barium	ppm	3	---	---	---
Boron	ppm	520	---	---	---

Diagnosis

We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample. Copper ppm levels are noted. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other component wear rates are normal. Test for glycol is positive. There is a high concentration of glycol present in the oil. There is a moderate concentration of water present in the oil. The oil is no longer serviceable due to the presence of contaminants.

Depot: REMAN
 Unique No: 5723696
 Signed: Kevin Marson
 Report Date: 12 Feb 2024



GRAPHS

