

LIEBHERR

CONSTRUCTION EQUIPMENT



2018.03.3854 - Diesel Engine

Sample No: LH0276248

Oil Type: SAE 5W30



Sample Information

Sample Number	LH0276248	---	---	---
Sample Date	29 Apr 2024	---	---	---
Machine Hours	530	---	---	---
Oil Hours	0	---	---	---
Oil Changed	N/A	---	---	---
Sample Status	SEVERE	---	---	---

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	● 5.6	---	---	---
Oxidation (PA)	%	48	---	---	---



Contamination

Water	%	NEG	---	---	---
Soot %	%	● 0	---	---	---
Nitration (PA)	%	49	---	---	---
Sulfation (PA)	%	42	---	---	---
Glycol	%	● 0.063	---	---	---
Fuel	%	● 41.5	---	---	---
Silicon	ppm	● 6	---	---	---
Sodium	ppm	● 1	---	---	---
Potassium	ppm	● 4	---	---	---

Diagnosis

We advise that you check the fuel injection system. 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. Metal levels are typical for a new component breaking in. Test for glycol is positive. There is a high amount of fuel present in the oil. There is a moderate concentration of glycol present in the oil. There is a moderate concentration of water 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	● 2	---	---	---
Copper	ppm	● 31	---	---	---
Lead	ppm	● <1	---	---	---
Tin	ppm	● 0	---	---	---
Aluminum	ppm	● <1	---	---	---
Chromium	ppm	● 0	---	---	---
Molybdenum	ppm	<1	---	---	---
Nickel	ppm	● 0	---	---	---
Titanium	ppm	● <1	---	---	---
Silver	ppm	● 0	---	---	---
Manganese	ppm	● 0	---	---	---
Vanadium	ppm	0	---	---	---



Additives

Calcium	ppm	● 1341	---	---	---
Magnesium	ppm	26	---	---	---
Zinc	ppm	● 718	---	---	---
Phosphorus	ppm	● 644	---	---	---
Barium	ppm	● <1	---	---	---
Boron	ppm	● 29	---	---	---

Depot: REMAN
Unique No: 5773377
Signed: Kevin Marson
Report Date: 01 May 2024



Graphs

