

LIEBHERR

CONSTRUCTION EQUIPMENT



C21.03.90261 - Diesel Engine

Sample No: LH0289486

Oil Type: {unknown}



Sample Information

Sample Number	LH0289486	---	---	---
Sample Date	09 Apr 2024	---	---	---
Machine Hours	1163	---	---	---
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	10.2	---	---	---
Oxidation (PA)	%	18	---	---	---



Contamination

Water	%	NEG	---	---	---
Soot %	%	0	---	---	---
Nitration (PA)	%	36	---	---	---
Sulfation (PA)	%	31	---	---	---
Glycol	%	0.401	---	---	---
Fuel	%	0.8	---	---	---
Silicon	ppm	3	---	---	---
Sodium	ppm	1	---	---	---
Potassium	ppm	64	---	---	---



Wear Metals

Iron	ppm	11	---	---	---
Copper	ppm	19	---	---	---
Lead	ppm	1	---	---	---
Tin	ppm	0	---	---	---
Aluminum	ppm	4	---	---	---
Chromium	ppm	<1	---	---	---
Molybdenum	ppm	4	---	---	---
Nickel	ppm	<1	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	3	---	---	---
Vanadium	ppm	0	---	---	---



Additives

Calcium	ppm	1093	---	---	---
Magnesium	ppm	62	---	---	---
Zinc	ppm	291	---	---	---
Phosphorus	ppm	240	---	---	---
Barium	ppm	9	---	---	---
Boron	ppm	17	---	---	---

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. All component wear rates are normal. Fuel content negligible. 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. Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The oil is no longer serviceable due to the presence of contaminants.

Depot: REMAN
Unique No: 5760944
Signed: Kevin Marson
Report Date: 11 Apr 2024



Graphs

