

# C19.03.90076 - DIESEL ENGINE

Sample No: LH0291273

Oil Type: {unknown}

## SAMPLE INFORMATION

Sample Number	LH0291273	---	---	---
Sample Date	14 May 2024	---	---	---
Machine Hours	7138	---	---	---
Oil Hours	0	---	---	---
Oil Changed	N/A	---	---	---
Sample Status	ABNORMAL	---	---	---

### LIEBHERR CANADA LTD. - REMAN

1015 SUTTON DRIVE

BURLINGTON, ON

CA L7L 5Z8

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## OIL CONDITION

Visc @ 100°C	cSt	█ 16.7	---	---	---
Oxidation (PA)	%	█ 85	---	---	---

## CONTAMINATION

Water	%	▲ 0.575	---	---	---
Soot %	%	█ 0.5	---	---	---
Nitration (PA)	%	█ 118	---	---	---
Sulfation (PA)	%	█ 59	---	---	---
Glycol	%	█ 0.0	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	█ 10	---	---	---
Sodium	ppm	█ 5	---	---	---
Potassium	ppm	█ 2	---	---	---

## WEAR METALS

Iron	ppm	█ 31	---	---	---
Copper	ppm	█ 20	---	---	---
Lead	ppm	█ <1	---	---	---
Tin	ppm	█ 0	---	---	---
Aluminum	ppm	█ 15	---	---	---
Chromium	ppm	█ <1	---	---	---
Molybdenum	ppm	█ 61	---	---	---
Nickel	ppm	█ <1	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	█ 0	---	---	---
Manganese	ppm	1	---	---	---
Vanadium	ppm	0	---	---	---

## ADDITIVES

Calcium	ppm	█ 830	---	---	---
Magnesium	ppm	█ 1139	---	---	---
Zinc	ppm	█ 1233	---	---	---
Phosphorus	ppm	█ 1048	---	---	---
Barium	ppm	█ <1	---	---	---
Boron	ppm	█ 18	---	---	---

## Diagnosis

We advise that you check for the source of water entry. 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. All component wear rates are normal. There is a moderate concentration of water present in the oil. Test for glycol is negative. The oil is no longer serviceable due to the presence of contaminants.

Depot: REMAN

Unique No: 5776740

Signed: Kevin Marson

Report Date: 16 May 2024

# GRAPHS

