

LIEBHERR

CONSTRUCTION EQUIPMENT



081712-1211 - Diesel Engine

Sample No: LH0277430

Oil Type: NOT GIVEN



SAMPLE INFORMATION

Sample Number	LH0277430	---	---	---
Sample Date	30 Oct 2023	---	---	---
Machine Hours	13694	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	SEVERE	---	---	---

LIEBHERR CANADA LTD.
 1015 SUTTON DRIVE
 BURLINGTON, ON
 CA L7L 5Z8
 Contact: Steve Lehto
 steve.lehto@liebherr.com
 T: (905)319-9222
 F: (905)319-6617



OIL CONDITION

Visc @ 100°C	cSt	● 8.3	---	---	---
Oxidation (PA)	%	● 61	---	---	---



CONTAMINATION

Soot %	%	● 0.6	---	---	---
Nitration (PA)	%	● 78	---	---	---
Sulfation (PA)	%	● 52	---	---	---
Glycol	%	● NEG	---	---	---
Fuel	%	● 25.1	---	---	---
Silicon	ppm	● 6	---	---	---
Sodium	ppm	● 2	---	---	---
Potassium	ppm	● 0	---	---	---

Diagnosis

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. 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 high amount of fuel 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	● 24	---	---	---
Copper	ppm	● 6	---	---	---
Lead	ppm	● 1	---	---	---
Tin	ppm	● 0	---	---	---
Aluminum	ppm	● 7	---	---	---
Chromium	ppm	● <1	---	---	---
Molybdenum	ppm	● 49	---	---	---
Nickel	ppm	● <1	---	---	---
Titanium	ppm	● 0	---	---	---
Silver	ppm	● <1	---	---	---
Manganese	ppm	● 0	---	---	---
Vanadium	ppm	● 0	---	---	---



ADDITIVES

Calcium	ppm	● 892	---	---	---
Magnesium	ppm	● 802	---	---	---
Zinc	ppm	● 989	---	---	---
Phosphorus	ppm	● 831	---	---	---
Barium	ppm	● <1	---	---	---
Boron	ppm	● 1	---	---	---

Depot: LIEMIS
Unique No: 5670096
Signed: Wes Davis
Report Date: 01 Nov 2023



GRAPHS

