

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### U23.01.90001 - Diesel Engine

Sample No: LH0281534

Oil Type: DIESEL ENGINE OIL SAE 15W40



#### SAMPLE INFORMATION

Sample Number	LH0281534	---	---	---
Sample Date	31 Jan 2024	---	---	---
Machine Hours	249	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Not Chngd	---	---	---
Sample Status	NORMAL	---	---	---

**LIEBHERR CANADA LTD. - REMAN**  
 1015 SUTTON DRIVE  
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#### OIL CONDITION

Visc @ 100°C	cSt	13.5	---	---	---
Oxidation (PA)	%	59	---	---	---



#### CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	0.2	---	---	---
Nitration (PA)	%	65	---	---	---
Sulfation (PA)	%	56	---	---	---
Glycol	%	0.0	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	13	---	---	---
Sodium	ppm	25	---	---	---
Potassium	ppm	3	---	---	---



#### WEAR METALS

Iron	ppm	23	---	---	---
Copper	ppm	121	---	---	---
Lead	ppm	11	---	---	---
Tin	ppm	8	---	---	---
Aluminum	ppm	3	---	---	---
Chromium	ppm	<1	---	---	---
Molybdenum	ppm	6	---	---	---
Nickel	ppm	<1	---	---	---
Titanium	ppm	78	---	---	---
Silver	ppm	<1	---	---	---
Manganese	ppm	<1	---	---	---
Vanadium	ppm	0	---	---	---



#### ADDITIVES

Calcium	ppm	1911	---	---	---
Magnesium	ppm	423	---	---	---
Zinc	ppm	1122	---	---	---
Phosphorus	ppm	1006	---	---	---
Barium	ppm	32	---	---	---
Boron	ppm	126	---	---	---

#### Diagnosis

Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: REMAN  
 Unique No: 5722733  
 Signed: Wes Davis  
 Report Date: 07 Feb 2024



### GRAPHS

