

LIEBHERR

CONSTRUCTION EQUIPMENT



2013.04.2783 - Diesel Engine

Sample No: LH0285145
 Oil Type: DIESEL ENGINE OIL SAE 15W40



SAMPLE INFORMATION

Sample Number	LH0285145	---	---	---
Sample Date	19 Feb 2024	---	---	---
Machine Hours	50	---	---	---
Oil Hours	0	---	---	---
Oil Changed	N/A	---	---	---
Sample Status	ABNORMAL	---	---	---

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	11.9	---	---	---
Oxidation (PA)	%	65	---	---	---



CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	0	---	---	---
Nitration (PA)	%	55	---	---	---
Sulfation (PA)	%	53	---	---	---
Glycol	%	0.0	---	---	---
Fuel	%	0.9	---	---	---
Silicon	ppm	9	---	---	---
Sodium	ppm	20	---	---	---
Potassium	ppm	1	---	---	---

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. Fuel content negligible. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The condition of the oil is acceptable for the time in service.



WEAR METALS

Iron	ppm	8	---	---	---
Copper	ppm	15	---	---	---
Lead	ppm	6	---	---	---
Tin	ppm	1	---	---	---
Aluminum	ppm	2	---	---	---
Chromium	ppm	<1	---	---	---
Molybdenum	ppm	57	---	---	---
Nickel	ppm	<1	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	<1	---	---	---
Manganese	ppm	<1	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	859	---	---	---
Magnesium	ppm	1089	---	---	---
Zinc	ppm	1163	---	---	---
Phosphorus	ppm	1041	---	---	---
Barium	ppm	19	---	---	---
Boron	ppm	55	---	---	---

Depot: REMAN
 Unique No: 5735977
 Signed: Kevin Marson
 Report Date: 04 Mar 2024



GRAPHS

