

LIEBHERR

CONSTRUCTION EQUIPMENT



20159 - Left Final Drive

Sample No: LH0284901

Oil Type: {unknown}



SAMPLE INFORMATION

Sample Number	LH0284901	---	---	---
Sample Date	08 Feb 2024	---	---	---
Machine Hours	8331	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Not Chngd	---	---	---
Sample Status	ABNORMAL	---	---	---

LIEBHERR CANADA LTD.
 1015 SUTTON DRIVE
 BURLINGTON, ON
 CA L7L 5Z8
 Contact: Joseph Rodgers
 joseph.rodgers@liebherr.com
 T:
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OIL CONDITION

Visc @ 40°C	cSt	● 99.0	---	---	---
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CONTAMINATION

Water	%	NEG	---	---	---
Silicon	ppm	● 597	---	---	---
Sodium	ppm	● 35	---	---	---
Potassium	ppm	● 80	---	---	---



WEAR METALS

PQ		● 323	---	---	---
Iron	ppm	● 1073	---	---	---
Copper	ppm	● 2	---	---	---
Lead	ppm	● <1	---	---	---
Tin	ppm	● 0	---	---	---
Aluminum	ppm	● 198	---	---	---
Chromium	ppm	● 4	---	---	---
Molybdenum	ppm	● 0	---	---	---
Nickel	ppm	● <1	---	---	---
Titanium	ppm	● 10	---	---	---
Silver	ppm	● 0	---	---	---
Manganese	ppm	● 10	---	---	---
Vanadium	ppm	● 0	---	---	---



ADDITIVES

Calcium	ppm	2409	---	---	---
Magnesium	ppm	81	---	---	---
Zinc	ppm	917	---	---	---
Phosphorus	ppm	758	---	---	---
Barium	ppm	<1	---	---	---
Boron	ppm	35	---	---	---

Diagnosis

We advise that you check all areas where dirt can enter the system. 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. Iron ppm levels are abnormal. Aluminum ppm levels are noted. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. High amount of ingressed dirt has caused abrasive wear to the component. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot: LIEMIS
 Unique No: 5723854
 Signed: Kevin Marson
 Report Date: 13 Feb 2024



GRAPHS

