

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR R946 045234-1491 - Swing Drive

Sample No: LH0200527

Oil Type: LIEBHERR GEAR BASIC 90 LS



LIEBHERR EQUIPMENT SOURCE

4100 CHESTNUT AVENUE
NEWPORT NEWS, VA
US 23607

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SAMPLE INFORMATION

Sample Number	LH0200527	---	---	---
Sample Date	19 May 2023	---	---	---
Machine Hours	2071	---	---	---
Oil Hours	2071	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	SEVERE	---	---	---



OIL CONDITION

Visc @ 40°C	cSt	● 337	---	---	---
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CONTAMINATION

Water	%	● 3.86	---	---	---
Silicon	ppm	● 3	---	---	---
Sodium	ppm	● 2	---	---	---
Potassium	ppm	● 3	---	---	---



WEAR METALS

Iron	ppm	● 1224	---	---	---
Copper	ppm	● 237	---	---	---
Lead	ppm	● 2	---	---	---
Tin	ppm	● 12	---	---	---
Aluminum	ppm	● 2	---	---	---
Chromium	ppm	● 11	---	---	---
Molybdenum	ppm	● 1	---	---	---
Nickel	ppm	● 2	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	<1	---	---	---
Manganese	ppm	● 11	---	---	---
Vanadium	ppm	<1	---	---	---



ADDITIVES

Calcium	ppm	● 10	---	---	---
Magnesium	ppm	● 2	---	---	---
Zinc	ppm	17	---	---	---
Phosphorus	ppm	● 2201	---	---	---
Barium	ppm	● 0	---	---	---
Boron	ppm	● 3	---	---	---

Diagnosis

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. The iron level is abnormal. All other metal levels are typical for a new component breaking in. There is a high concentration of water present in the oil. Free water present. Confirm oil type. The oil is no longer serviceable due to the presence of contaminants.

Depot: LIEBHERRUS
Unique No: 10494796
Signed: Don Baldrige
Report Date: 01 Jun 2023



GRAPHS

