

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR R938 1650-50726 - Left Final Drive

Sample No: LH0244725

Oil Type: GEAR OIL SAE 80W90



SAMPLE INFORMATION

Sample Number	LH0244725	LH0236522	---	---
Sample Date	13 Oct 2023	01 Aug 2022	---	---
Machine Hours	973	0	---	---
Oil Hours	0	516	---	---
Oil Changed	Not Chngd	Changed	---	---
Sample Status	SEVERE	NORMAL	---	---

DIEHL AND NUEMAIER

5466 NORWAY GROVE SCHOOL RD
DE FOREST, WI
US 53532
Contact: ELLIOT DIEHL
diehlneumaier@yahoo.com
T: (608)846-4824
F: (608)846-2077



OIL CONDITION

Visc @ 40°C	cSt	136	198	---	---
-------------	-----	-----	-----	-----	-----



CONTAMINATION

Silicon	ppm	623	74	---	---
Sodium	ppm	16	7	---	---
Potassium	ppm	36	5	---	---



WEAR METALS

Iron	ppm	958	209	---	---
Copper	ppm	2	<1	---	---
Lead	ppm	2	0	---	---
Tin	ppm	<1	<1	---	---
Aluminum	ppm	81	15	---	---
Chromium	ppm	14	3	---	---
Molybdenum	ppm	5	<1	---	---
Nickel	ppm	5	1	---	---
Titanium	ppm	7	1	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	12	3	---	---
Vanadium	ppm	0	0	---	---



ADDITIVES

Calcium	ppm	721	125	---	---
Magnesium	ppm	338	48	---	---
Zinc	ppm	67	31	---	---
Phosphorus	ppm	820	1311	---	---
Barium	ppm	0	6	---	---
Boron	ppm	19	4	---	---

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. Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The oil is no longer serviceable due to the presence of contaminants.

Depot: DIEDEF
Unique No: 10701554
Signed: Doug Bogart
Report Date: 20 Oct 2023



GRAPHS

