

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L550 054859-1214 - Front Differential

Sample No: LH

Oil Type: GEAR OIL SAE 80W90



SAMPLE INFORMATION

Sample Number	LH	LH0168459	LH0168485	---
Sample Date	16 Nov 2023	23 Dec 2021	23 Apr 2021	---
Machine Hours	1717	1000	533	---
Oil Hours	0	0	0	---
Oil Changed	N/A	N/A	N/A	---
Sample Status	SEVERE	NORMAL	NORMAL	---

EMBELLISSEMENTS ROLI-VERT INC.
 5219 BOUL. ST-MARTIN OUEST
 LAVAL, QC
 CA H7T 2X8
 Contact: Service Manager



OIL CONDITION

Visc @ 40°C	cSt	193	193	193	---
-------------	-----	-----	-----	-----	-----

T:
F:



CONTAMINATION

Water	%	NEG	NEG	NEG	---
Silicon	ppm	35	18	16	---
Sodium	ppm	11	6	5	---
Potassium	ppm	<1	1	<1	---

Diagnosis

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. Copper and tin ppm levels are severe. Lead ppm levels are abnormal. Thrust washer and/or bearing/bushing wear is indicated. There is no indication of any contamination in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.



WEAR METALS

Iron	ppm	1001	381	232	---
Copper	ppm	215	107	80	---
Lead	ppm	6	4	3	---
Tin	ppm	10	4	2	---
Aluminum	ppm	3	1	<1	---
Chromium	ppm	5	2	1	---
Molybdenum	ppm	52	18	10	---
Nickel	ppm	2	1	<1	---
Titanium	ppm	0	0	0	---
Silver	ppm	<1	0	<1	---
Manganese	ppm	56	26	19	---
Vanadium	ppm	0	0	0	---



ADDITIVES

Calcium	ppm	13	11	12	---
Magnesium	ppm	4	3	3	---
Zinc	ppm	54	30	23	---
Phosphorus	ppm	2340	2323	2260	---
Barium	ppm	1	0	<1	---
Boron	ppm	3	3	3	---

Depot: EMBLAV
 Unique No: 5682252
 Signed: Kevin Marson
 Report Date: 17 Nov 2023



GRAPHS

