

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50 1216-116574 - Rear Differential

Sample No: LH0171173

Oil Type: GEAR OIL SAE 80W90



SAMPLE INFORMATION

Sample Number	LH0171173	LH0171117	LH0171103	LH0171089
Sample Date	29 Aug 2023	27 Apr 2023	27 Jan 2023	04 Aug 2020
Machine Hours	17910	16726	14930	2000
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Not Changd
Sample Status	NORMAL	NORMAL	ABNORMAL	NORMAL

BOISE WHITE PAPER

3RD AVE AND HWY 11, 400 2ND ST
INTERNATIONAL FALLS, MN
US 56649
Contact: GARY MANN
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OIL CONDITION

Visc @ 40°C	cSt	142	181	155	168



CONTAMINATION

Element	ppm	3	4	9	7
Silicon	ppm	3	4	9	7
Sodium	ppm	3	2	3	3
Potassium	ppm	0	2	0	<1



WEAR METALS

Element	ppm	77	77	203	52
Iron	ppm	77	77	203	52
Copper	ppm	14	12	53	21
Lead	ppm	0	0	1	0
Tin	ppm	0	0	0	0
Aluminum	ppm	<1	<1	0	0
Chromium	ppm	0	<1	1	<1
Molybdenum	ppm	2	<1	<1	<1
Nickel	ppm	0	0	<1	<1
Titanium	ppm	<1	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	1	2	4	2
Vanadium	ppm	<1	<1	0	0



ADDITIVES

Element	ppm	39	15	57	85
Calcium	ppm	39	15	57	85
Magnesium	ppm	6	1	2	2
Zinc	ppm	16	7	47	23
Phosphorus	ppm	1096	2176	1833	1963
Barium	ppm	0	0	<1	2
Boron	ppm	21	29	170	195

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: BOIINT
Unique No: 10633784
Signed: Sean Felton
Report Date: 08 Sep 2023



GRAPHS

