

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50 1216-116574 - Front Differential

Sample No: LH0171172

Oil Type: GEAR OIL SAE 80W90



SAMPLE INFORMATION

Sample Number	LH0171172	LH0171116	LH0171102	LH0171088
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
garymann@packagingcorp.com
T:
F: (218)285-5860



OIL CONDITION

Visc @ 40°C	cSt	138	190	186	184



CONTAMINATION

Element	ppm	<1	<1	9	5
Silicon	ppm	<1	<1	9	5
Sodium	ppm	1	2	3	3
Potassium	ppm	0	2	0	<1



WEAR METALS

Iron	ppm	23	17	211	67
Copper	ppm	7	1	35	15
Lead	ppm	0	0	<1	0
Tin	ppm	0	0	<1	0
Aluminum	ppm	<1	<1	1	0
Chromium	ppm	0	0	2	<1
Molybdenum	ppm	2	0	<1	<1
Nickel	ppm	0	0	2	<1
Titanium	ppm	<1	0	<1	<1
Silver	ppm	0	0	0	<1
Manganese	ppm	<1	1	5	2
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	45	3	7	5
Magnesium	ppm	8	0	2	<1
Zinc	ppm	11	0	23	5
Phosphorus	ppm	927	2119	1158	1081
Barium	ppm	0	0	393	369
Boron	ppm	5	2	<1	3

Diagnosis

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. 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: 10633779
Signed: Sean Felton
Report Date: 08 Sep 2023



GRAPHS

