

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH50M 135058-1216 - Swing Drive

Sample No: LH

Oil Type: GEAR OIL SAE 80W90



**GEORGIA PACIFIC NORTH WOODS LP**  
 327022 HWY #11 NORTH  
 ENGLEHART, ON  
 CA P0J 1H0  
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#### SAMPLE INFORMATION

Sample Number	LH	LH0228612	LH0228588	LH0228564
Sample Date	20 Dec 2022	20 Dec 2022	15 May 2022	18 Apr 2022
Machine Hours	17471	17471	0	1000
Oil Hours	0	0	0	0
Oil Changed	N/A	N/A	N/A	N/A
Sample Status	SEVERE	NORMAL	NORMAL	NORMAL



#### OIL CONDITION

Visc @ 40°C	cSt	142	139	144	173



#### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	4	2	2	2
Sodium	ppm	2	<1	1	4
Potassium	ppm	0	0	0	1



#### WEAR METALS

Iron	ppm	914	8	75	140
Copper	ppm	453	4	34	38
Lead	ppm	15	0	1	1
Tin	ppm	2	<1	1	2
Aluminum	ppm	<1	0	<1	<1
Chromium	ppm	6	0	<1	<1
Molybdenum	ppm	<1	0	0	<1
Nickel	ppm	2	0	<1	<1
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	6	0	<1	1
Vanadium	ppm	0	0	0	0



#### ADDITIVES

Calcium	ppm	8	6	8	42
Magnesium	ppm	3	0	<1	2
Zinc	ppm	14	4	6	18
Phosphorus	ppm	1084	1023	1225	2245
Barium	ppm	0	0	2	7
Boron	ppm	158	166	156	21

#### Diagnosis

We advise that you check for the source of water entry. 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. Lead ppm levels are severe. Copper ppm levels are abnormal. Bearing and/or bushing wear is indicated. There is a moderate concentration of water present in the oil. Free water present. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot: GRAENG  
 Unique No: 5512083  
 Signed: Kevin Marson  
 Report Date: 03 Jan 2023



### GRAPHS

