# LIEBHERR



## LIEBHERR LH40M 101800-1215 - Front Right Wheel Hub

**Sample No:** LH06042449

Oil Type: GEAR OIL SAE 80W90

<b>5</b>						
U SAM	PLE INF	DRMATION				
Sample Number		LH06042449	LH05688610	LHMC98621		
Sample Date		20 Dec 2023	07 Nov 2022	21 Nov 2019		
Machine Hours		6013	5008	2034		
Oil Hours		0	0	0		
Oil Changed		Changed	Not Changd	Changed		
Sample Status		NORMAL	NORMAL	NORMAL		
OIL CONDITION						
Visc @ 40°C	cSt	<b>170</b>	O 179	179		
<b>ii</b>						

CONTAMINATION							
Water	%	NEG	NEG	NEG			
Silicon	ppm	<b>12</b>	O 10	<b>16</b>			
Sodium	ppm	<b>26</b>	<b>2</b> 7	O 16			
Potassium	ppm	<b>2</b>	<b>3</b>	O <1			

<b>WEA</b>	R METAI	LS			
Iron	ppm	<b>175</b>	O 127	O 138	
Copper	ppm	<b>18</b>	O 18	○ 32	
Lead	ppm	<b>0</b>	O <1	0	
Tin	ppm	<b>0</b>	O <1	O	
Aluminum	ppm	<b>1</b>	O 2	O 2	
Chromium	ppm	<b>○</b> <1	O <1	O 1	
Molybdenum	ppm	<b>0</b>	O <1	<1	
Nickel	ppm	<b>○</b> <1	O 0	0	
Titanium	ppm	<b>()</b> <1	O <1	<1	
Silver	ppm	0	0	0	
Manganese	ppm	<b>3</b>	<b>3</b>	3	
Vanadium	ppm	0	0	0	

ADDITIVES							
Calcium	ppm	<b>59</b>	O 68	99			
Magnesium	ppm	<b>3</b>	01	2			
Zinc	ppm	<b>26</b>	○ 30	47			
Phosphorus	ppm	<b>2117</b>	O 2226	1935			
Barium	ppm	<b>0</b>	O 0	<1			
Boron	ppm	<b>3</b>	<b>3</b>	4			



#### DIEHL AND NUEMAIER

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#### 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:DIEDEFUnique No:10803057Signed:Wes DavisReport Date:22 Dec 2023





### **GRAPHS**

