

# LIEBHERR PR77615946 - Left Final Drive

Sample No: LH0272639

Oil Type: CHEVRON MULTIGEAR EP5 80W90

# **Sample Information**

Sample Number		LH0272639	LH0220502	LH0220508		
Sample Date		07 Feb 2024	14 Oct 2023 10 May 2023			
Machine Hours		10496	8488	9275		
Oil Hours		0	0	0		
Oil Changed		N/A	Not Changd	Not Changd		
Sample Status		NORMAL	NORMAL	NORMAL		
Oil Condition						
Visc @ 40°C	cSt	0 134	232	231		

#### **Contamination** % Water NEG NEG NEG Silicon 04 02 ppm 06 0 <1 0 <1 Sodium 0 ppm

Potassium	ppm	02	0 2	○ <1	
Wea	r Metals				
Iron	ppm	<b>0</b> 141	◯ 485	324	
Copper	ppm	02	0 1	○ <1	
Lead	ppm	0 (	0	0	
Tin	ppm	<b>○</b> <1	0	0	
Aluminum	ppm	02	○ <1	0 1	
Chromium	ppm	01	<b>○</b> 5	3	
Molybdenum	ppm	<b>○</b> <1	○ <1	○ <1	
Nickel	ppm	<b>○</b> <1	01	○ <1	
Titanium	ppm	<1	0	0	
Silver	ppm	<1	0	0	
Manganese	ppm	01	04	3	
Vanadium	ppm	<1	0	0	

Additives

Calcium	ppm	0 39	69	0 10	
Magnesium	ppm	0 19	01	○ <1	
Zinc	ppm	0 39	0 35	0 4	
Phosphorus	ppm	0 959	0 401	0 410	
Barium	ppm	<b>○</b> <1	0	0	
Boron	ppm	0 156	◯ 53	0 49	





### LIEBHERR MINING EQUIPMENT CO

5800 S DOUGLAS HWY GILLETTE, WY US 82718 Contact: SCOTT BRADLEY scott.bradley@liebherr.com T: F:

# Diagnosis

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

Depot:LIEGILUnique No:11122945Signed:Don BaldridgeReport Date:14 Jul 2024Contact/Location:SCOTT BRADLEY - LIEGIL







Graphs

## Ferrous Alloys 500 iron 450 chromium nickel 400 350 300 L. 250 200 150 100 50 0 Feb7/24 -0ct14/23 May10/23 Non-ferrous Metals 10 copper 9 m lead tin 8 6 ppm 5 3 2 0 0ct14/23 Feb7/24 May10/23 Viscosity @ 40°C 240 220 200 Abnormal 140 120 Abnormal 100 Oct14/23 -Feb7/24 -May10/23

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