# LIEBHERR

### **CONSTRUCTION EQUIPMENT**



Sample No: LH0263941

Oil Type: GEAR OIL SAE 80W90

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SAMI	PLE INFO	RMATION				
Sample Number		LH0263941	LHMC142226	LHMC106329		
Sample Date		19 Dec 2023	03 May 2019	02 Jun 2017		
Machine Hours		31068	22895	17931		
Oil Hours		2000	500	500		
Oil Changed		Changed	Changed	Changed		
Sample Status		NORMAL	NORMAL	NORMAL		
OIL CONDITION						
Visc @ 40°C	cSt	<b>172</b>	○ 331	326.4		
CONTAMINATION						

CONTAMINATION							
Water	%	NEG	NEG	NEG			
Silicon	ppm	<b>8</b>	<b>3</b>	<b>4</b>			
Sodium	ppm	<b>5</b>	O 2	O 2			
Potassium	ppm	<b>0</b>	<b>7</b>	<b>1</b>			

WEA	R METALS	5			
Iron	ppm	<b>63</b>	O 11	<b>4</b>	
Copper	ppm	<b>9</b>	O <1	O <1	
Lead	ppm	<b>0</b>	O 2	O	
Tin	ppm	<b></b> <1	0	0	
Aluminum	ppm	<b>1</b>	O <1	<1	
Chromium	ppm	<b></b> <1	O 0	O <1	
Molybdenum	ppm	<b>1</b>	O 2	<1	
Nickel	ppm	<b>0</b>	O 0	O 0	
Titanium	ppm	<1	0	<1	
Silver	ppm	0	0	0	
Manganese	ppm	<b>()</b> <1	<b>0</b>	<1	
Vanadium	ppm	<1	0	0	

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ADDITIVES						
Calcium	ppm	<b>9</b> 4	<b>5</b> 3	O 44		
Magnesium	ppm	<b>15</b>	O 6	O 2		
Zinc	ppm	<b>18</b>	O 22	<b>28</b>		
Phosphorus	ppm	<b>1413</b>	O 947	833		
Barium	ppm	<b>0</b>	O 0	<1		
Boron	ppm	<b>147</b>	O 156	<b>138</b>		



#### NORTHERN METAL RECYCLING

2800 PACIFIC ST N MINNEAPOLIS, MN US 55411

Contact: CHRIS GILMER chris.gilmer@emrgroup.com

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F:

#### Diagnosis

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL SAE 80W90. Please confirm.

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: NORMINLH
Unique No: 10844608
Signed: Wes Davis
Report Date: 23 Jan 2024

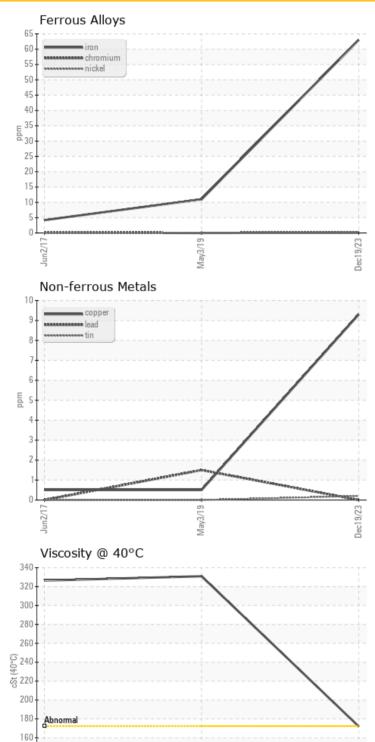
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### **GRAPHS**



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