

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### [CNRL] 5210 - Left Final Drive

Sample No: LH0238062

Oil Type: GEAR OIL SAE 80W140



#### SAMPLE INFORMATION

Sample Number	LH0238062	LH0238111	LH0209722	---
Sample Date	27 Jun 2023	21 Jan 2023	01 Nov 2022	---
Machine Hours	23538	21125	19582	---
Oil Hours	0	0	0	---
Oil Changed	Not Changd	Not Changd	Not Changd	---
Sample Status	ABNORMAL	NORMAL	NORMAL	---

#### Liebherr-Canada Ltd.

Fort McKay Industrial Park, Lot No. 12 and 13  
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 CA T9H 5N3  
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#### OIL CONDITION

Visc @ 40°C	cSt	739	234	216	---
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#### CONTAMINATION

Silicon	ppm	40	3	4	---
Sodium	ppm	<1	<1	1	---
Potassium	ppm	<1	<1	3	---



#### WEAR METALS

Iron	ppm	79	102	104	---
Copper	ppm	<1	2	4	---
Lead	ppm	<1	0	<1	---
Tin	ppm	0	0	0	---
Aluminum	ppm	2	<1	<1	---
Chromium	ppm	1	<1	<1	---
Molybdenum	ppm	<1	<1	<1	---
Nickel	ppm	3	1	1	---
Titanium	ppm	<1	0	0	---
Silver	ppm	0	0	0	---
Manganese	ppm	<1	1	2	---
Vanadium	ppm	<1	0	0	---



#### ADDITIVES

Calcium	ppm	5	12	7	---
Magnesium	ppm	<1	2	<1	---
Zinc	ppm	3	12	12	---
Phosphorus	ppm	395	1050	1124	---
Barium	ppm	0	0	0	---
Boron	ppm	<1	250	250	---

#### 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. Viscosity of sample indicates oil is within ISO 680 range, advise investigate. The condition of the oil is acceptable for the time in service.

Depot: LIEFTM  
 Unique No: 5605129  
 Signed: Kevin Marson  
 Report Date: 06 Jul 2023



### GRAPHS

