

LIEBHERR

CONSTRUCTION EQUIPMENT



188367 - 2 Winch

Sample No: LH0296491

Oil Type: LIEBHERR GEAR BASIC 90 LS



Sample Information

Sample Number	LH0296491	---	---	---
Sample Date	21 Jun 2024	---	---	---
Machine Hours	652	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

LIEBHERR CANADA LTD.

1015 SUTTON DRIVE
BURLINGTON, ON
CA L7L 5Z8

Contact: Steve Lehto
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Oil Condition

Visc @ 40°C	cSt	251	---	---	---
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Contamination

Water	%	NEG	---	---	---
Silicon	ppm	● 4	---	---	---
Sodium	ppm	● 1	---	---	---
Potassium	ppm	● <1	---	---	---



Wear Metals

Iron	ppm	● 9	---	---	---
Copper	ppm	● <1	---	---	---
Lead	ppm	● 0	---	---	---
Tin	ppm	0	---	---	---
Aluminum	ppm	● <1	---	---	---
Chromium	ppm	● 0	---	---	---
Molybdenum	ppm	● 0	---	---	---
Nickel	ppm	● <1	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	● 0	---	---	---
Vanadium	ppm	0	---	---	---



Additives

Calcium	ppm	43	---	---	---
Magnesium	ppm	● <1	---	---	---
Zinc	ppm	32	---	---	---
Phosphorus	ppm	292	---	---	---
Barium	ppm	● 2	---	---	---
Boron	ppm	● 13	---	---	---

Diagnosis

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. All component wear rates are normal. Free water present. Additive levels indicate the addition of a different brand, or type of oil. Viscosity of sample indicates oil is within ISO 220 range, advise investigate. The oil is no longer serviceable due to the presence of contaminants.

Depot: LIEMIS
Unique No: 5801936
Signed: Kevin Marson
Report Date: 27 Jun 2024



Graphs

