

LIEBHERR

CONSTRUCTION EQUIPMENT



[MARATHON] LIEBHERR HS855 184576 - Boom Winch

Sample No: LH0296759

Oil Type: GEAR OIL SAE 75W90



LIEBHERR CANADA LTD.
 1015 SUTTON DRIVE
 BURLINGTON, ON
 CA L7L 5Z8
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Sample Information

Sample Number	LH0296759	LH0140940	---	---
Sample Date	27 Jun 2024	30 May 2019	---	---
Machine Hours	25032	21032	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Not Changd	---	---
Sample Status	NORMAL	ABNORMAL	---	---



Oil Condition

Visc @ 40°C	cSt	165	● 115	---	---
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Contamination

Water	%	NEG	● 0.231	---	---
Silicon	ppm	● 1	● 2	---	---
Sodium	ppm	● 3	● 4	---	---
Potassium	ppm	● <1	● <1	---	---



Wear Metals

Iron	ppm	● 35	● 17	---	---
Copper	ppm	● <1	● 0	---	---
Lead	ppm	● 0	● <1	---	---
Tin	ppm	0	<1	---	---
Aluminum	ppm	● <1	● <1	---	---
Chromium	ppm	● <1	0	---	---
Molybdenum	ppm	● <1	● <1	---	---
Nickel	ppm	● <1	0	---	---
Titanium	ppm	<1	<1	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	● 1	● 1	---	---
Vanadium	ppm	0	0	---	---



Additives

Calcium	ppm	● 15	● 16	---	---
Magnesium	ppm	● 6	● 1	---	---
Zinc	ppm	● 15	● 192	---	---
Phosphorus	ppm	362	● 1342	---	---
Barium	ppm	● <1	● 0	---	---
Boron	ppm	● 23	● 112	---	---

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. Viscosity of sample indicates oil is within SAE 90 range, advise investigate. The condition of the oil is acceptable for the time in service.

Depot: LIEMIS
 Unique No: 5802494
 Signed: Kevin Marson
 Report Date: 02 Jul 2024



Graphs

