

LIEBHERR

CONSTRUCTION EQUIPMENT



165392 (S/N LIEMIS) - Winch

Sample No: LH0270310

Oil Type: LIEBHERR 85W90



SAMPLE INFORMATION

Sample Number	LH0270310	LH0112581	---	---
Sample Date	22 Feb 2024	20 Jul 2021	---	---
Machine Hours	1751	1234	---	---
Oil Hours	0	0	---	---
Oil Changed	Not Changd	Not Changd	---	---
Sample Status	NORMAL	NORMAL	---	---

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OIL CONDITION

Visc @ 40°C	cSt	● 101	● 108	---	---
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CONTAMINATION

Water	%	NEG	NEG	---	---
Silicon	ppm	● 8	● 6	---	---
Sodium	ppm	● 7	● 5	---	---
Potassium	ppm	● 5	● 0	---	---

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. The condition of the oil is acceptable for the time in service.



WEAR METALS

PQ		453	---	---	---
Iron	ppm	● 212	● 88	---	---
Copper	ppm	● 1	● <1	---	---
Lead	ppm	● <1	● <1	---	---
Tin	ppm	0	0	---	---
Aluminum	ppm	● 2	● 1	---	---
Chromium	ppm	● 3	1	---	---
Molybdenum	ppm	0	● <1	---	---
Nickel	ppm	● 1	<1	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	1	● <1	---	---
Vanadium	ppm	0	0	---	---



ADDITIVES

Calcium	ppm	488	● 264	---	---
Magnesium	ppm	5	● 3	---	---
Zinc	ppm	79	● 66	---	---
Phosphorus	ppm	1746	● 1751	---	---
Barium	ppm	1	● <1	---	---
Boron	ppm	224	● 269	---	---

Depot: LIEMIS
 Unique No: 5734850
 Signed: Kevin Marson
 Report Date: 26 Feb 2024



GRAPHS

