LIEBHERR
CONSTRUCTION EQUIPMENT

LIEBHERR LH30M 85396 - Slewing Gearbox

Sample No: LH0224923

Oil Type: SAE 75W90

LIEBHERR CANADA LTD.
10374 267 ST.
ACHESON, AB
CA T7X 6A2
Contact: Keelan Brereton
Keelan.Brereton@liebherr.com
T: (780)962-7751
F: (780)962-6799

SAMPLE INFORMATION

Sample Number		**LH0224923**	---	---	---
Sample Date		**20 Sep 2023**	---	---	---
Machine Hours		**0**	---	---	---
Oil Hours		**0**	---	---	---
Oil Changed		**Changed**	---	---	---
Sample Status		**SEVERE**	---	---	---

OIL CONDITION

Visc @ 40°C	cSt	**147**	---	---	---

CONTAMINATION

Water	%	**10.15**	---	---	---
Silicon	ppm	**6**	---	---	---
Sodium	ppm	**3**	---	---	---
Potassium	ppm	**<1**	---	---	---

WEAR METALS

PQ		**922**	---	---	---
Iron	ppm	**1161**	---	---	---
Copper	ppm	**436**	---	---	---
Lead	ppm	**11**	---	---	---
Tin	ppm	**10**	---	---	---
Aluminum	ppm	**<1**	---	---	---
Chromium	ppm	**13**	---	---	---
Molybdenum	ppm	**<1**	---	---	---
Nickel	ppm	**<1**	---	---	---
Titanium	ppm	**0**	---	---	---
Silver	ppm	**<1**	---	---	---
Manganese	ppm	**9**	---	---	---
Vanadium	ppm	**0**	---	---	---

ADDITIVES

Calcium	ppm	**102**	---	---	---
Magnesium	ppm	**2**	---	---	---
Zinc	ppm	**133**	---	---	---
Phosphorus	ppm	**1197**	---	---	---
Barium	ppm	**<1**	---	---	---
Boron	ppm	**6**	---	---	---

Diagnosis

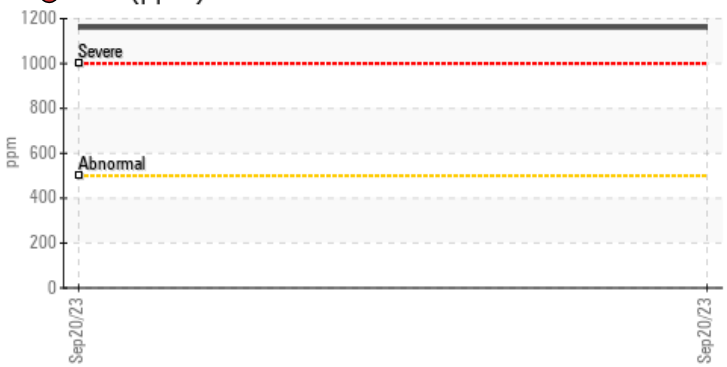
We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.Chromium and copper, iron, lead and tin ppm levels are severe. PQ levels are abnormal. The high ferrous density (PQ) index indicates that abnormal wear is occurring. There is a high concentration of water present in the oil. Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot: LIESPR
Unique No: 5646691
Signed: Kevin Marson
Report Date: 02 Oct 2023

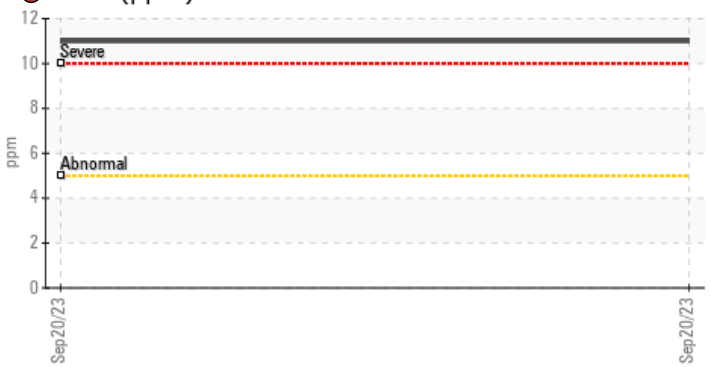
LIEBHERR
CONSTRUCTION EQUIPMENT

GRAPHS

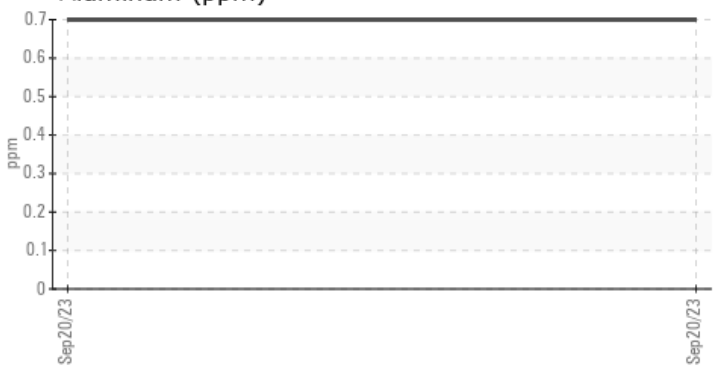
Iron (ppm)



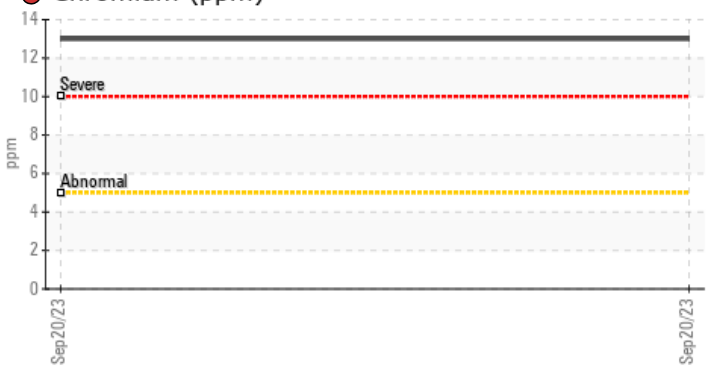
Lead (ppm)



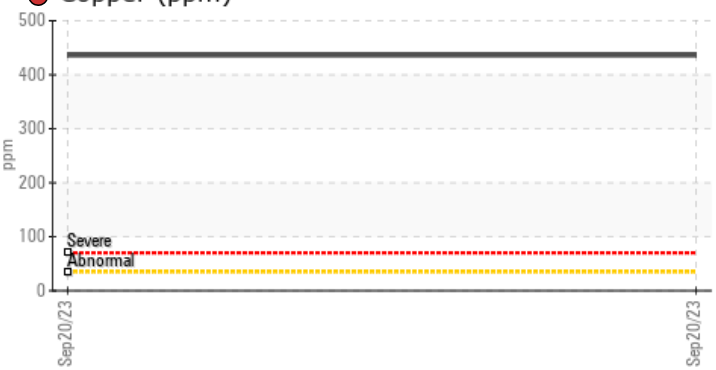
Aluminum (ppm)



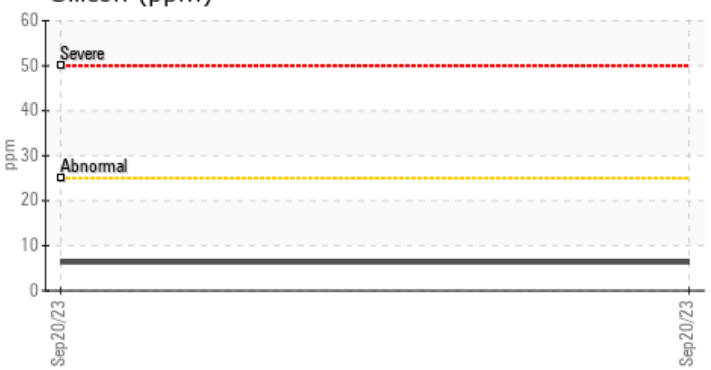
Chromium (ppm)



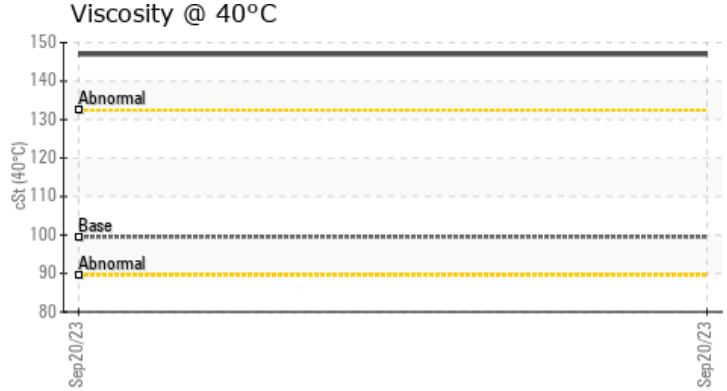
Copper (ppm)



Silicon (ppm)



Viscosity @ 40°C



Water