## CONSTRUCTION EQUIPMENT

## LIBHERR 113 - 1 Winch

Sample No: LH0183671

Oil Type: LIEBHERR GEAR HYPOID 90 EP

## Sample Information

Sample Number	LH0183671
Sample Date	14 Mar 2024
Machine Hours	588
Oil Hours	125
Oil Changed	N/A
Sample Status	NORMAL

**Oil Condition** 

Visc @ 40°C

Potassium

## cSt

ppm

<b>Č</b>	ntaminati	on	
Water	%	NEG	 
Silicon	ppm	0	 
Sodium	ppm	03	 

0 182

**○** <1

#### $\bigcirc$ **Wear Metals** Iron ppm 0 121 Copper 06 ppm Lead 0 ppm Tin ppm 0 Aluminum ppm 0 <1 Chromium ppm 02 Molybdenum 0 ( ppm Nickel ppm ○ <1 Titanium ppm 0 Silver 0 ppm Manganese ○ <1 ppm Vanadium ppm 0

0 **Additives** Calcium 69 ppm Magnesium 1 ppm Zinc 0 57 ppm Phosphorus ppm 756 Barium 03 ppm Boron ppm 1





### LIEBHERR CANADA LTD.

49C MEWS PLACE ST. JOHN'S, NL CA A1B 4N2 Contact: Warren Coombs warren.coombs@liebherr.com T: F: (709)368-6494

## Diagnosis

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

Depot:LIE49STJUnique No:5760199Signed:Wes DavisReport Date:05 Apr 2024

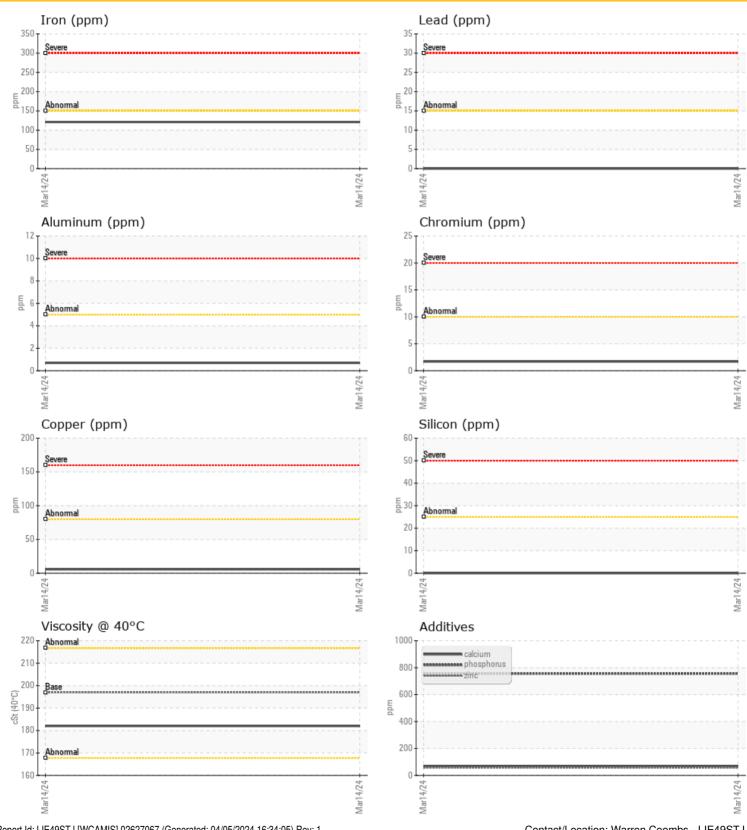
Contact/Location: Warren Coombs - LIE49STJ

# CONSTRUCTION EQUIPMENT



Graphs

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Contact/Location: Warren Coombs - LIE49STJ