

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### [TECHNICORE] 116005 - Hydraulic System

Sample No: LH0270486

Oil Type: LIEBHERR HYDRAULIC 37



#### SAMPLE INFORMATION

Sample Number	LH0270486	---	---	---
Sample Date	27 Aug 2023	---	---	---
Machine Hours	7090	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Not Chngd	---	---	---
Sample Status	NORMAL	---	---	---

**LIEBHERR CANADA LTD.**  
 1015 SUTTON DRIVE  
 BURLINGTON, ON  
 CA L7L 5Z8  
 Contact: Joseph Gillis  
 joseph.gillis@liebherr.com  
 T:  
 F: (905)319-6622



#### OIL CONDITION

Visc @ 40°C	cSt	29.1	---	---	---
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#### CONTAMINATION

Particles >4µm		4219	---	---	---
Particles >6µm		853	---	---	---
Particles >14µm		66	---	---	---
ISO 4406:1999 (c)		19/17/13	---	---	---
Silicon	ppm	1	---	---	---
Sodium	ppm	<1	---	---	---
Potassium	ppm	<1	---	---	---



#### WEAR METALS

Iron	ppm	3	---	---	---
Copper	ppm	9	---	---	---
Lead	ppm	1	---	---	---
Tin	ppm	<1	---	---	---
Aluminum	ppm	0	---	---	---
Chromium	ppm	0	---	---	---
Molybdenum	ppm	<1	---	---	---
Nickel	ppm	0	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	<1	---	---	---
Manganese	ppm	0	---	---	---
Vanadium	ppm	0	---	---	---



#### ADDITIVES

Calcium	ppm	95	---	---	---
Magnesium	ppm	2	---	---	---
Zinc	ppm	320	---	---	---
Phosphorus	ppm	280	---	---	---
Barium	ppm	<1	---	---	---
Boron	ppm	2	---	---	---

#### Diagnosis

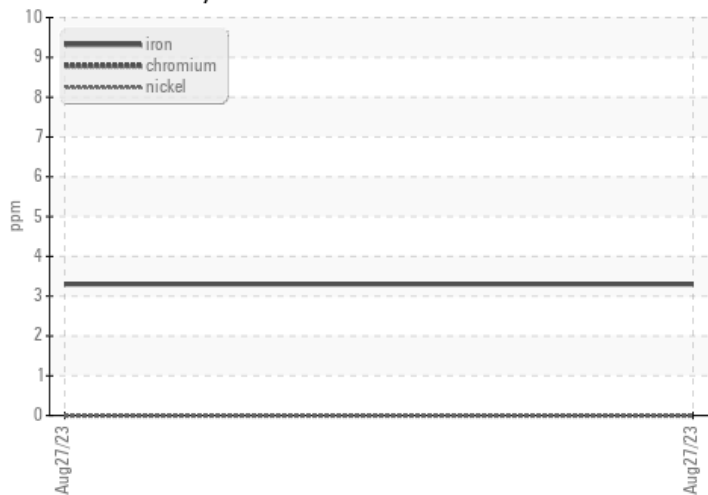
Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as LIEBHERR HYDRAULIC 37, however, a fluid match indicates that this fluid is ISO 32 AW Hydraulic Oil. Please confirm the oil type and grade on your next sample. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The oil viscosity is lower than typical, possibly indicating the addition of lighter grade oil. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.

Depot: LIEMIS  
 Unique No: 5656243  
 Signed: Kevin Marson  
 Report Date: 06 Oct 2023

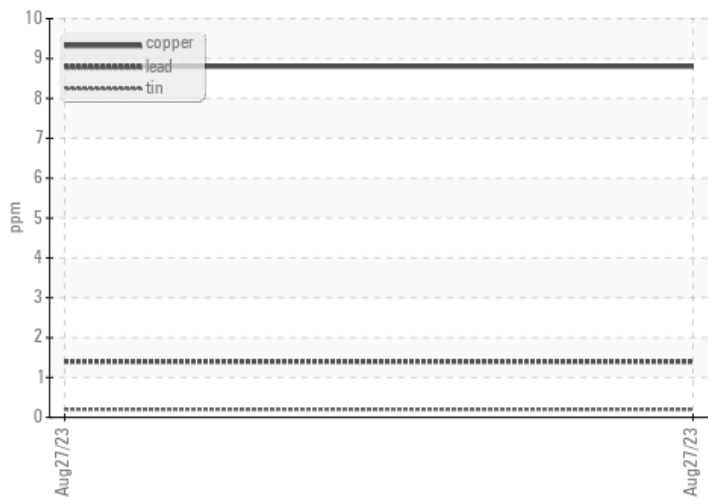


### GRAPHS

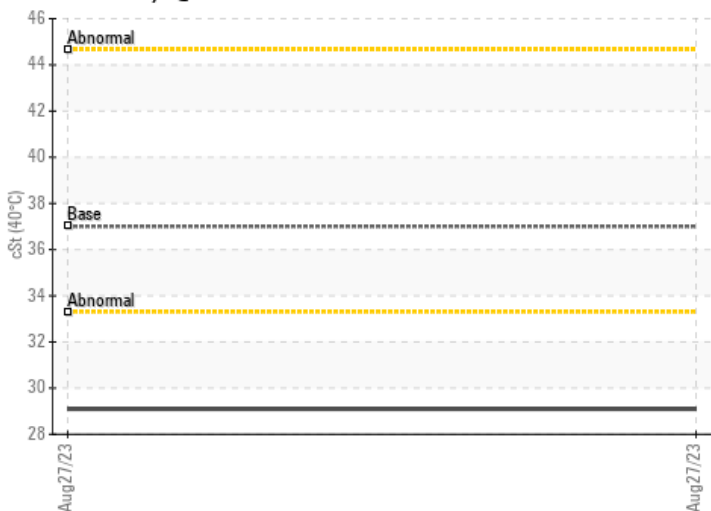
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Particle Count

