

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH30 115463 - Hydraulic System

Sample No: LH0284045

Oil Type: LIEBHERR HYDRAULIC HVI



#### Liebherr Canada

140 - 21320 Gordon Way

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CA V6W 1J8

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#### SAMPLE INFORMATION

Sample Number	LH0284045	---	---	---
Sample Date	02 Feb 2024	---	---	---
Machine Hours	530	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Not Chngd	---	---	---
Sample Status	ABNORMAL	---	---	---



#### OIL CONDITION

Visc @ 40°C	cSt	37.1	---	---	---
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#### CONTAMINATION

Water	%	NEG	---	---	---
Particles >4µm		2050	---	---	---
Particles >6µm		411	---	---	---
Particles >14µm		34	---	---	---
ISO 4406:1999 (c)		18/16/12	---	---	---
Silicon	ppm	<1	---	---	---
Sodium	ppm	0	---	---	---
Potassium	ppm	<1	---	---	---



#### WEAR METALS

Iron	ppm	<1	---	---	---
Copper	ppm	2	---	---	---
Lead	ppm	<1	---	---	---
Tin	ppm	0	---	---	---
Aluminum	ppm	<1	---	---	---
Chromium	ppm	0	---	---	---
Molybdenum	ppm	0	---	---	---
Nickel	ppm	0	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	0	---	---	---
Vanadium	ppm	0	---	---	---



#### ADDITIVES

Calcium	ppm	59	---	---	---
Magnesium	ppm	<1	---	---	---
Zinc	ppm	334	---	---	---
Phosphorus	ppm	268	---	---	---
Barium	ppm	0	---	---	---
Boron	ppm	0	---	---	---

#### 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 HVI, 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. Viscosity of sample indicates oil is within ISO 32 range, advise investigate. 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: LIERIC

Unique No: 5722874

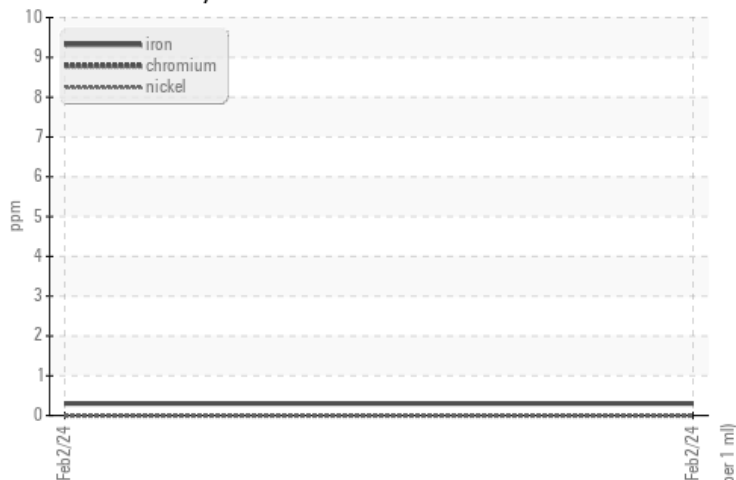
Signed: Bill Quesnel

Report Date: 06 Feb 2024

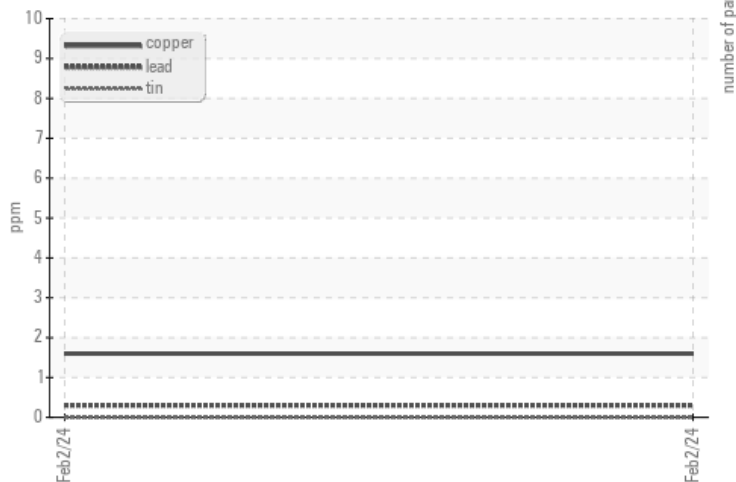


### GRAPHS

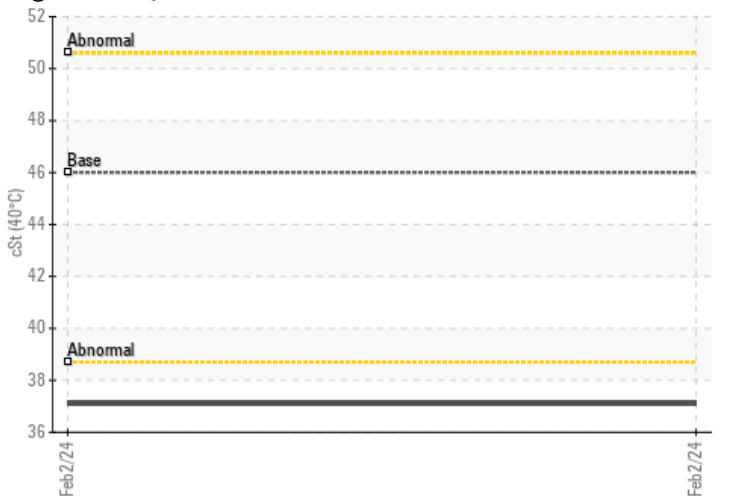
#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C



#### Particle Count

