

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### [(341438) [592207]] LIEBHERR LH60C 119413-1528 - Hydraulic

Sample No: LH0281029

Oil Type: PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL



#### SAMPLE INFORMATION

Sample Number	LH0281029	LH0269768	LH0224962	LH0221793
Sample Date	24 Jan 2024	21 Sep 2023	27 Oct 2022	10 Aug 2022
Machine Hours	8175	7642	6459	6039
Oil Hours	0	0	0	0
Oil Changed	Changed	Not Changd	Not Changd	Not Changd
Sample Status	SEVERE	SEVERE	NORMAL	ATTENTION

**AltaSteel**  
 9401 34 St NW  
 Edmonton, AB  
 CA T6B 2X6  
 Contact: Richard Bailey  
 richard.bailey@altasteel.com  
 T:  
 F:



#### OIL CONDITION

Visc @ 40°C	cSt	38.5	38.1	38.3	38.4



#### CONTAMINATION

Water	%	NEG	0.017	NEG	NEG
Particles >4µm		930	16332	8733	16455
Particles >6µm		181	7082	2774	5976
Particles >14µm		11	1136	244	514
ISO 4406:1999 (c)		17/15/11	21/20/17	20/19/15	21/20/16
Silicon	ppm	<1	2	1	1
Sodium	ppm	2	2	2	2
Potassium	ppm	0	<1	<1	<1



#### WEAR METALS

PQ		17	14	---	---
Iron	ppm	97	95	48	42
Copper	ppm	9	10	9	10
Lead	ppm	0	<1	1	1
Tin	ppm	0	0	0	0
Aluminum	ppm	0	<1	<1	<1
Chromium	ppm	1	<1	<1	<1
Molybdenum	ppm	0	0	0	0
Nickel	ppm	0	<1	<1	<1
Titanium	ppm	0	0	0	0
Silver	ppm	0	<1	0	<1
Manganese	ppm	<1	1	1	<1
Vanadium	ppm	0	0	0	0



#### ADDITIVES

Calcium	ppm	469	464	514	539
Magnesium	ppm	2	2	2	2
Zinc	ppm	717	719	677	705
Phosphorus	ppm	572	595	605	574
Barium	ppm	0	<1	0	0
Boron	ppm	0	1	3	<1

#### Diagnosis

We recommend an early resample to monitor this condition. Re-sampling is suggested to confirm test results prior to significant maintenance activities being performed. Please indicate that this is a resample on your Sample Information Form (SIF). Iron ppm levels are severe. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The condition of the oil is acceptable for the time in service.

**Depot:** ALT940EDM  
**Unique No:** 5748549  
**Signed:** Kevin Marson  
**Report Date:** 21 Mar 2024

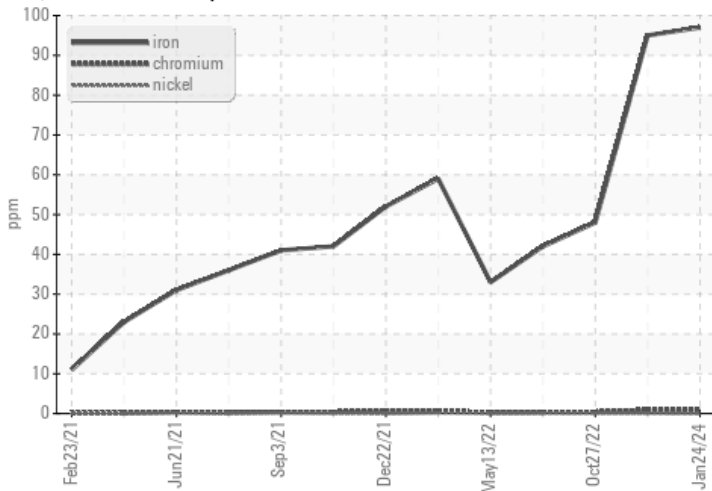
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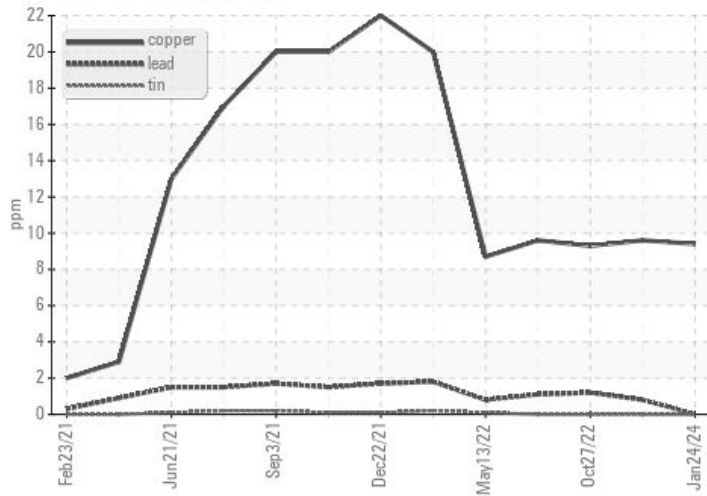


### GRAPHS

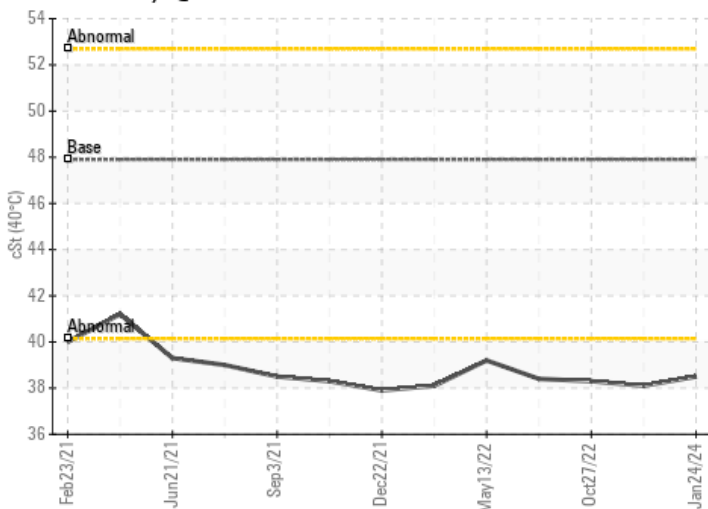
#### ● Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C



#### Particle Count

