

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### FAR 100090 - Coolant

Sample No: LH

Oil Type: HYBRID (HOAT) COOLANT



#### SAMPLE INFORMATION

Sample Number	LH	---	---	---
Sample Date	14 Nov 2023	---	---	---
Machine Hours	0	---	---	---
Sample Status	ABNORMAL	---	---	---

#### LIEBHERR CANADA LTD.

1015 SUTTON DRIVE  
BURLINGTON, ON  
CA L7L 5Z8

Contact: Joseph Rodgers  
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#### COOLANT CONDITION

Boron	ppm	● 420	---	---	---
Phosphorus	ppm	● 29	---	---	---
Sodium	ppm	● 3320	---	---	---
Potassium	ppm	● 324	---	---	---
Silicon	ppm	● 26	---	---	---
pH	Scale 0-14	● 8.15	---	---	---
Reserve Alkalinity	Scale 0-20	● 4.2	---	---	---
Molybdenum	ppm	● 73	---	---	---
Nitrites	ppm	● 440	---	---	---
Percentage Glycol	%	● 27.0	---	---	---
Freezing Point	°C	● 8	---	---	---

#### Diagnosis

We recommend that you perform a partial drain and top off with straight antifreeze to increase level of glycol. Recommend that you ensure the same technology coolant is being used for make-up. Resample at the next service interval to monitor. All metal levels are normal indicating no corrosion in the cooling system. There is no indication of any contamination in the coolant. The glycol level is low which leads to an increased rate of liner pitting and may be inadequate for freeze protection. The specific gravity is lower than typical indicating the addition of a different type of coolant. The pH level of this fluid is within the acceptable limits. The reserve alkalinity of this fluid is acceptable.



#### CONTAMINATION

Magnesium	ppm	● 12	---	---	---
Calcium	ppm	● 23	---	---	---
Coolant Appearance		● Clear	---	---	---
Coolant Color		● Grn/Yellow	---	---	---
Sand/Dirt	scalar	● NONE	---	---	---
Debris	scalar	● NONE	---	---	---
Precipitate	scalar	● NONE	---	---	---
Silt	scalar	● NONE	---	---	---



#### CORROSION

Iron	ppm	● 0	---	---	---
Aluminum	ppm	● 2	---	---	---
Copper	ppm	● 0	---	---	---
Lead	ppm	● 0	---	---	---
Tin	ppm	● 0	---	---	---

Depot: LIEMIS  
Unique No: 5681783  
Signed: Kevin Marson  
Report Date: 16 Nov 2023

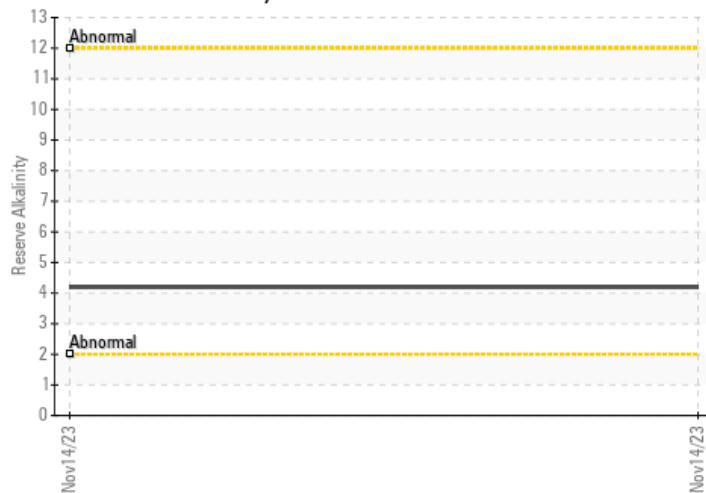


### GRAPHS

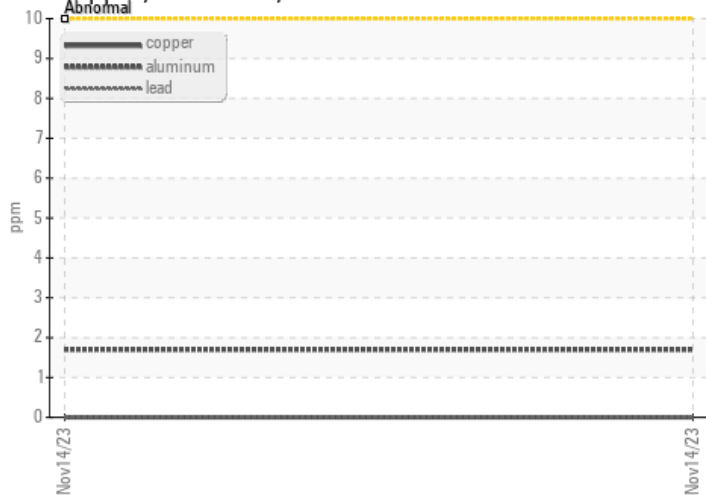
Iron/Tin/Silver



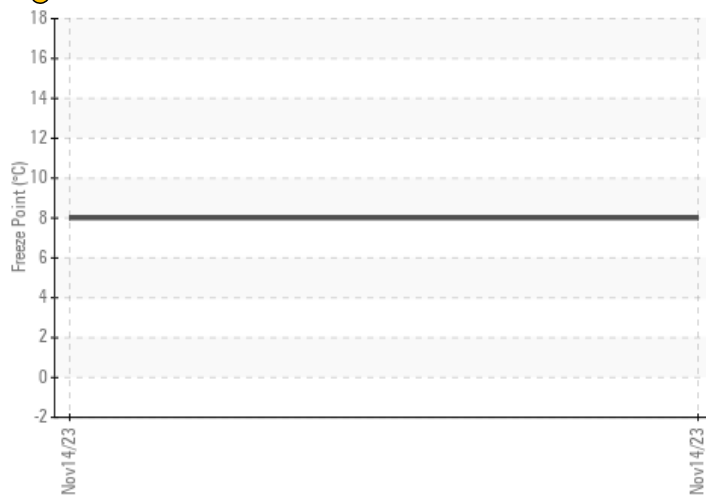
Reserve Alkalinity



Copper/Aluminum/Lead



Freeze Point



pH



Nitrites

