

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR CRT1000 98260 - Diesel Engine

Sample No: LH0268609

Oil Type: SAE 5W30



SAMPLE INFORMATION

Sample Number	LH0268609	---	---	---
Sample Date	10 Nov 2023	---	---	---
Machine Hours	2335	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Not Changd	---	---	---
Sample Status	SEVERE	---	---	---

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 US 77028
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OIL CONDITION

Base Number (BN)	mg KOH/g	96.4	---	---	---
Oxidation (PA)	%	132	---	---	---



CONTAMINATION

Water	%	10.5	---	---	---
Soot %	%	0.4	---	---	---
Nitration (PA)	%	343	---	---	---
Sulfation (PA)	%	0	---	---	---
Glycol	%	0.20	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	18	---	---	---
Sodium	ppm	2569	---	---	---
Potassium	ppm	611	---	---	---

Diagnosis

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition. Please note that there was too much water present in the oil to perform a viscosity test. Bearing and/or bushing wear is indicated. Sodium and/or potassium levels are high. Test for glycol is positive. There is a high concentration of water present in the oil. The oil is no longer serviceable due to the presence of contaminants.



WEAR METALS

Iron	ppm	24	---	---	---
Copper	ppm	18	---	---	---
Lead	ppm	32	---	---	---
Tin	ppm	3	---	---	---
Aluminum	ppm	1	---	---	---
Chromium	ppm	<1	---	---	---
Molybdenum	ppm	11	---	---	---
Nickel	ppm	<1	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	<1	---	---	---
Manganese	ppm	2	---	---	---
Vanadium	ppm	<1	---	---	---



ADDITIVES

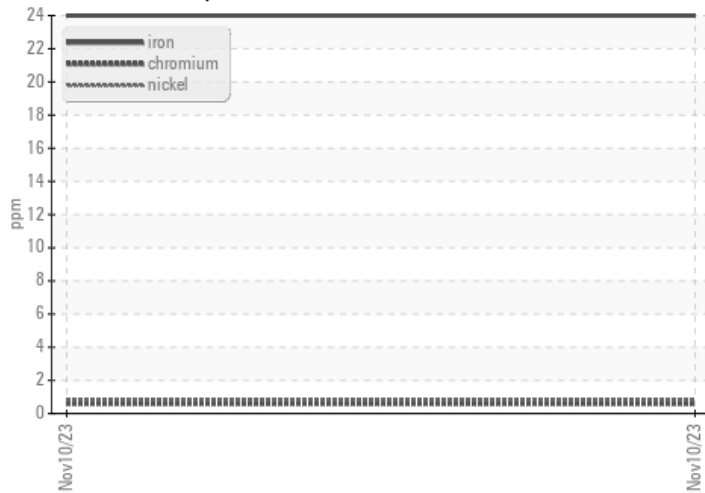
Calcium	ppm	1208	---	---	---
Magnesium	ppm	124	---	---	---
Zinc	ppm	857	---	---	---
Phosphorus	ppm	734	---	---	---
Barium	ppm	3	---	---	---
Boron	ppm	111	---	---	---

Depot: LIEHOU
Unique No: 10804353
Signed: Jonathan Hester
Report Date: 29 Dec 2023

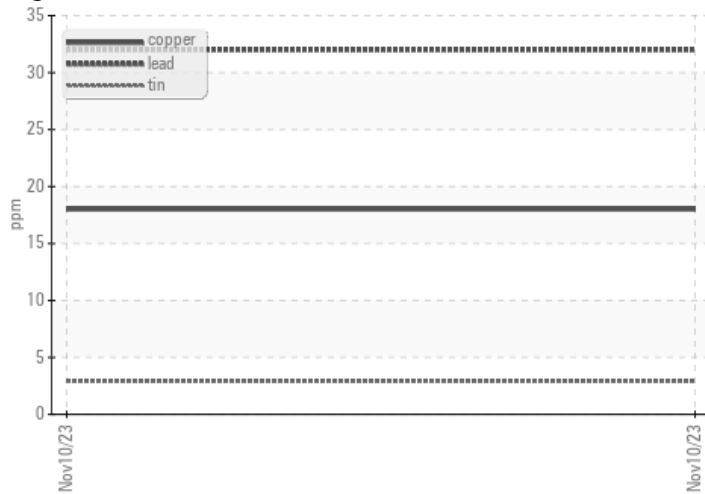


GRAPHS

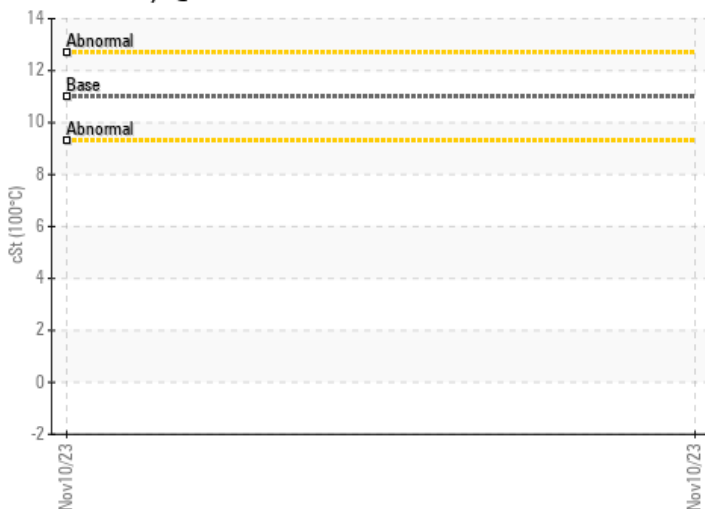
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

