

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR R920 54849 - Hydraulic System

Sample No: LH0274450

Oil Type: LIEBHERR HYDRAULIC HVI



LIEBHERR CANADA LTD.
 1015 SUTTON DRIVE
 BURLINGTON, ON
 CA L7L 5Z8
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SAMPLE INFORMATION

Sample Number	LH0274450	---	---	---
Sample Date	02 Aug 2023	---	---	---
Machine Hours	594	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---



OIL CONDITION

Visc @ 40°C	cSt	● 45.8	---	---	---
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CONTAMINATION

Particles >4µm		● 73608	---	---	---
Particles >6µm		● 27787	---	---	---
Particles >14µm		● 2150	---	---	---
ISO 4406:1999 (c)		23/22/18	---	---	---
Silicon	ppm	● 5	---	---	---
Sodium	ppm	● <1	---	---	---
Potassium	ppm	● 2	---	---	---



WEAR METALS

Iron	ppm	● 4	---	---	---
Copper	ppm	● 11	---	---	---
Lead	ppm	7	---	---	---
Tin	ppm	● 0	---	---	---
Aluminum	ppm	● 1	---	---	---
Chromium	ppm	● 0	---	---	---
Molybdenum	ppm	● 0	---	---	---
Nickel	ppm	● <1	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	<1	---	---	---
Manganese	ppm	● <1	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	561	---	---	---
Magnesium	ppm	● 3	---	---	---
Zinc	ppm	● 687	---	---	---
Phosphorus	ppm	● 634	---	---	---
Barium	ppm	● <1	---	---	---
Boron	ppm	● 1	---	---	---

Diagnosis

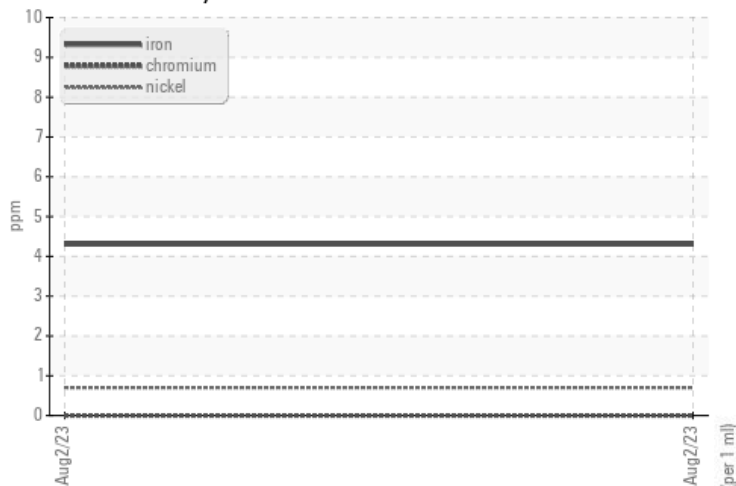
Check seals and/or filters for points of contaminant entry. We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of particulates (2 to 100 microns in size) present in the oil. There is a moderate concentration of water present in the oil. Free water present. The oil is no longer serviceable due to the presence of contaminants.

Depot: LIEMIS
 Unique No: 5619106
 Signed: Kevin Marson
 Report Date: 04 Aug 2023

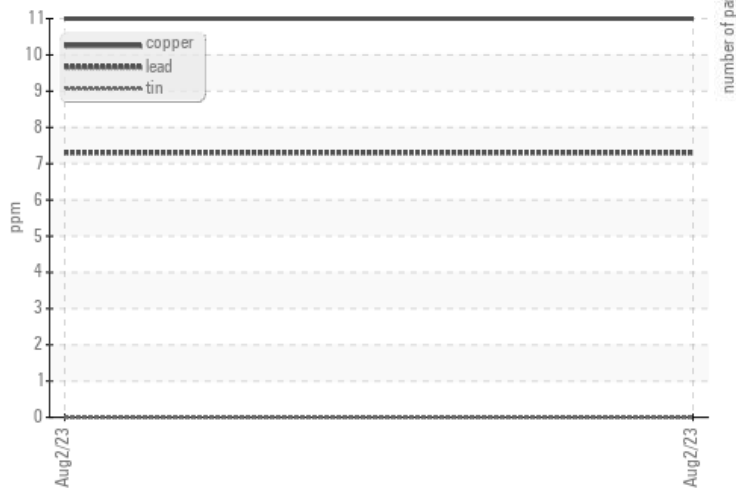


GRAPHS

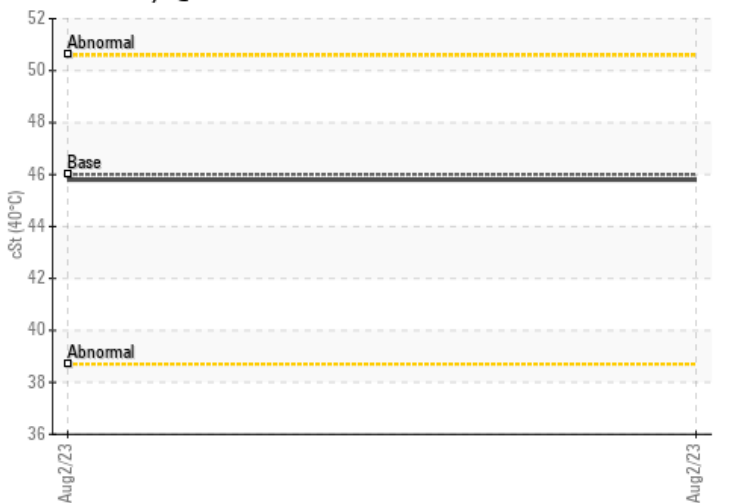
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Particle Count

