

LIEBHERR

CONSTRUCTION EQUIPMENT



[(348445) STRADA CRUSH] LIEBHERR R945 052652-1866 - Hydraulic System

Sample No: LH0242307

Oil Type: LIEBHERR HYDRAULIC HVI

CON-DRAIN LTD.

30 FLORAL PARKWAY

CONCORD, ON

CA L4K 4R1

Contact: B BAXTER

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T:

F:

Diagnosis

We advise that you check for visible metal particles in the oil. We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. An inspection for the source(s) of wear may be warranted at this time. 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). We were unable to perform a particle count due to metal particles present in this sample. Copper ppm levels are severe. Iron ppm levels are abnormal. Aluminum ppm levels are noted. Moderate concentration of visible metal present. Cylinder wear is indicated. Bearing and/or bushing wear is indicated. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. There is a moderate amount of visible silt present in the sample. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. High amount of ingressed dirt has caused abrasive wear to the component. Viscosity of sample indicates oil is within ISO 32 range, advise investigate. The oil is no longer serviceable as a result of the abnormal and/or severe wear.



SAMPLE INFORMATION

Sample Number		LH0242307	---	---	---
Sample Date		10 Jan 2024	---	---	---
Machine Hours		5034	---	---	---
Oil Hours		0	---	---	---
Oil Changed		Not Changd	---	---	---
Sample Status		SEVERE	---	---	---



OIL CONDITION

Visc @ 40°C	cSt	● 33.2	---	---	---
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CONTAMINATION

Water	%	NEG	---	---	---
Silicon	ppm	● 54	---	---	---
Sodium	ppm	● 5	---	---	---
Potassium	ppm	● 4	---	---	---



WEAR METALS

PQ		● 22	---	---	---
Iron	ppm	● 71	---	---	---
Copper	ppm	● 39	---	---	---
Lead	ppm	● 2	---	---	---
Tin	ppm	● <1	---	---	---
Aluminum	ppm	● 13	---	---	---
Chromium	ppm	● 2	---	---	---
Molybdenum	ppm	● 0	---	---	---
Nickel	ppm	● <1	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	● <1	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	● 981	---	---	---
Magnesium	ppm	● 16	---	---	---
Zinc	ppm	● 556	---	---	---
Phosphorus	ppm	● 494	---	---	---
Barium	ppm	● <1	---	---	---
Boron	ppm	● <1	---	---	---

Depot: CON30CON
 Unique No: 5710114
 Signed: Kevin Marson
 Report Date: 18 Jan 2024

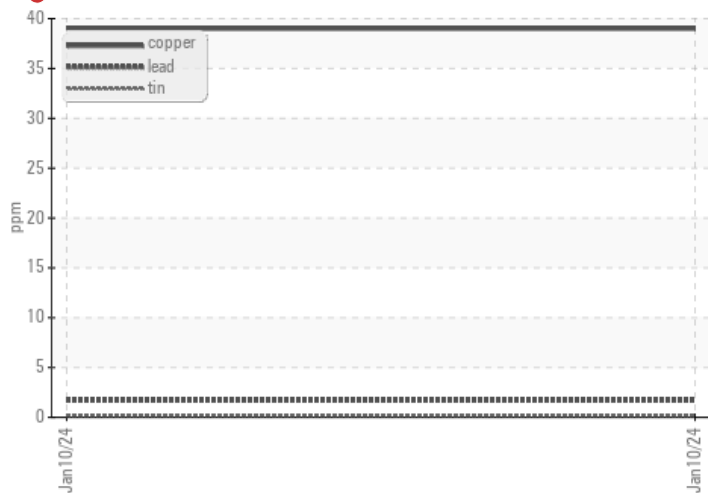


GRAPHS

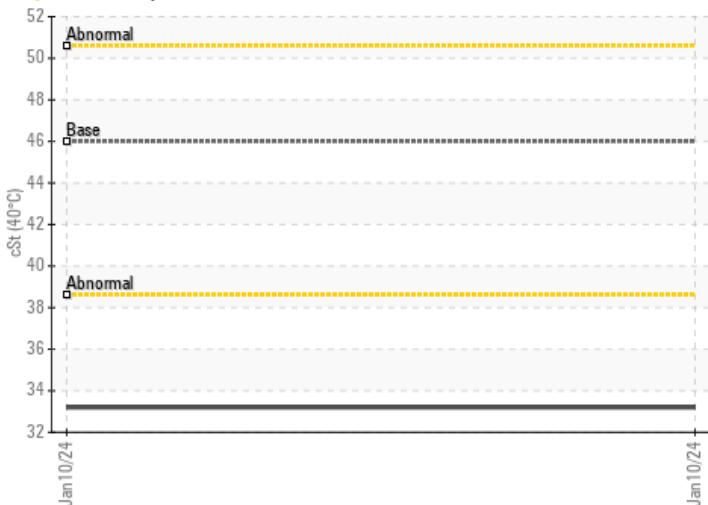
● Ferrous Alloys



● Non-ferrous Metals



● Viscosity @ 40°C



Particle Filter (Magn: 100 x)

