

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR PR766 027905-1681 - Hydraulic System

Sample No: LH0254250

Oil Type: AW HYDRAULIC OIL ISO 68



SAMPLE INFORMATION

Sample Number	LH0254250	LH0254466	LH0254460	---
Sample Date	14 Mar 2024	15 Feb 2024	13 Feb 2024	---
Machine Hours	1016	301	346	---
Oil Hours	1016	301	346	---
Oil Changed	Not Changd	Not Changd	Not Changd	---
Sample Status	ABNORMAL	NORMAL	NORMAL	---

HEAVY MACHINES INC.

3930 EAST RAINES RD
MEMPHIS, TN
US 38118
Contact: J. DAVIS
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OIL CONDITION

Visc @ 40°C	cSt	47.6	47.1	47.0	---
Acid Number (AN)	mg KOH/g	1.30	1.30	1.26	---



CONTAMINATION

Water	%	NEG	NEG	NEG	---
Particles >4µm		---	9594	6623	---
Particles >6µm		---	1368	2274	---
Particles >14µm		---	80	145	---
ISO 4406:1999 (c)		---	20/18/13	20/18/14	---
Silicon	ppm	6	7	5	---
Sodium	ppm	2	3	0	---
Potassium	ppm	0	0	4	---



WEAR METALS

Iron	ppm	4	3	2	---
Copper	ppm	6	5	3	---
Lead	ppm	0	<1	<1	---
Tin	ppm	<1	0	0	---
Aluminum	ppm	<1	0	1	---
Chromium	ppm	0	0	<1	---
Molybdenum	ppm	0	0	0	---
Nickel	ppm	0	0	0	---
Titanium	ppm	0	<1	0	---
Silver	ppm	0	0	0	---
Manganese	ppm	<1	<1	0	---
Vanadium	ppm	0	0	0	---



ADDITIVES

Calcium	ppm	1132	1224	1286	---
Magnesium	ppm	7	1	8	---
Zinc	ppm	661	601	706	---
Phosphorus	ppm	580	577	608	---
Barium	ppm	0	0	3	---
Boron	ppm	0	0	0	---

Diagnosis

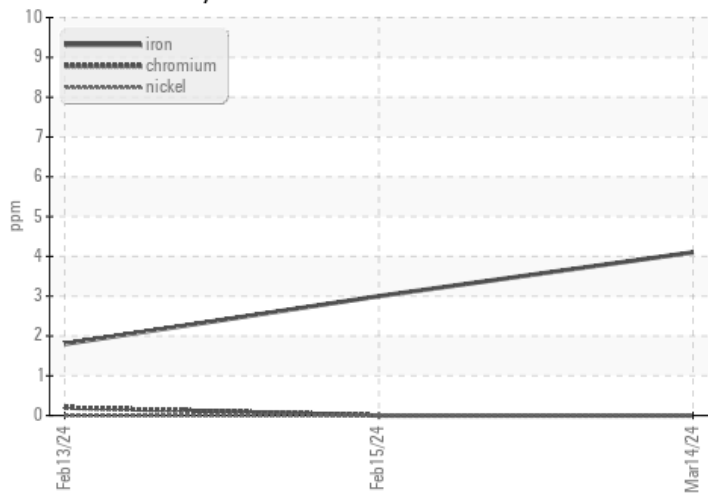
We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. Additive levels indicate the addition of a different brand, or type of oil. Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

Depot: LEC0051
Unique No: 10937742
Signed: Jonathan Hester
Report Date: 25 Mar 2024

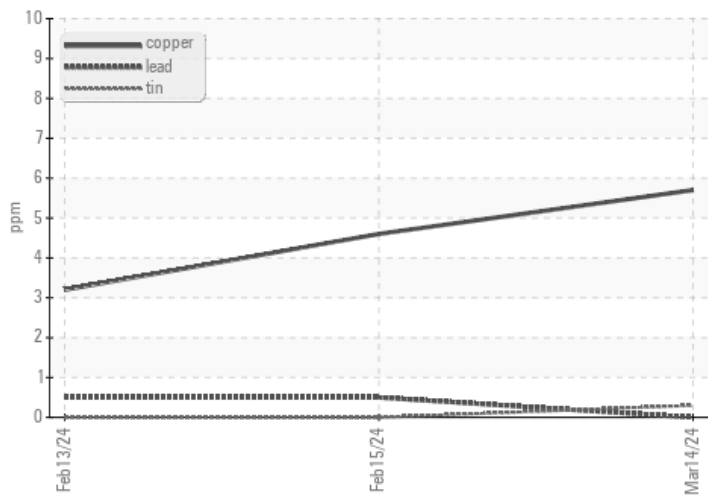


GRAPHS

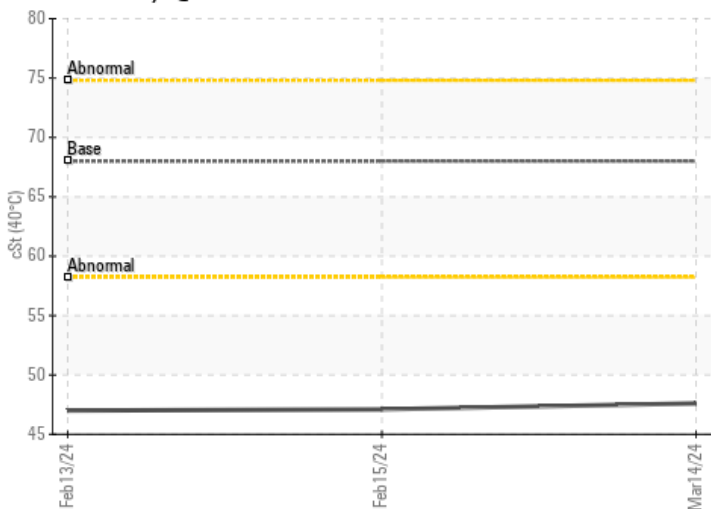
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Acid Number

