

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH60M 120561-1217 - Hydraulic System

Sample No: LH0253865
 Oil Type: NOT GIVEN



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SAMPLE INFORMATION

Sample Number	LH0253865	LH0236487	LH0220673	LH0200252
Sample Date	08 Sep 2023	02 Mar 2023	22 Nov 2022	10 Feb 2022
Machine Hours	3762	2565	1973	983
Oil Hours	0	2565	1973	0
Oil Changed	Not Chngd	Changed	Changed	Changed
Sample Status	ABNORMAL	NORMAL	NORMAL	NORMAL



OIL CONDITION

Visc @ 40°C	cSt	42.3	42.8	43.0	44.3
Acid Number (AN)	mg KOH/g	0.33	0.97	1.05	1.24



CONTAMINATION

Particles >4µm		4765	667	1173	2722
Particles >6µm		1644	190	238	746
Particles >14µm		140	24	16	71
ISO 4406:1999 (c)		19/18/14	17/15/12	17/15/11	19/17/13
Silicon	ppm	2	2	2	2
Sodium	ppm	3	2	2	2
Potassium	ppm	2	0	<1	<1



WEAR METALS

Iron	ppm	93	49	41	11
Copper	ppm	10	8	8	4
Lead	ppm	1	0	2	<1
Tin	ppm	0	0	<1	<1
Aluminum	ppm	0	<1	<1	<1
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	0	0	<1	<1
Nickel	ppm	0	0	0	0
Titanium	ppm	<1	0	0	0
Silver	ppm	<1	0	0	0
Manganese	ppm	2	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	997	951	1173	1135
Magnesium	ppm	6	6	10	9
Zinc	ppm	636	581	695	673
Phosphorus	ppm	543	480	571	555
Barium	ppm	0	0	0	0
Boron	ppm	0	0	0	1

Diagnosis

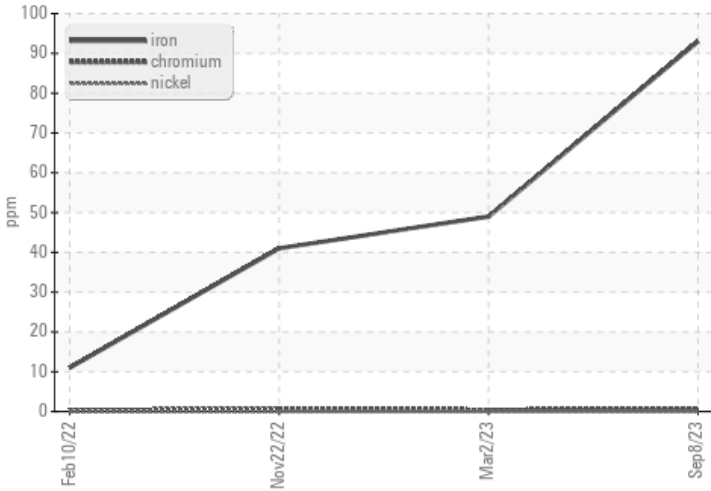
No corrective action is recommended at this time. Resample at the next service interval to monitor. The iron level is abnormal. All other component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Depot: LEC0008
 Unique No: 10670706
 Signed: Don Baldrige
 Report Date: 01 Oct 2023

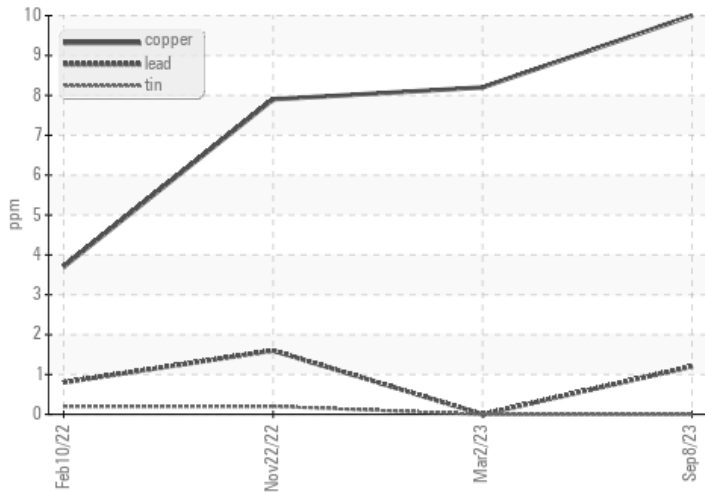


GRAPHS

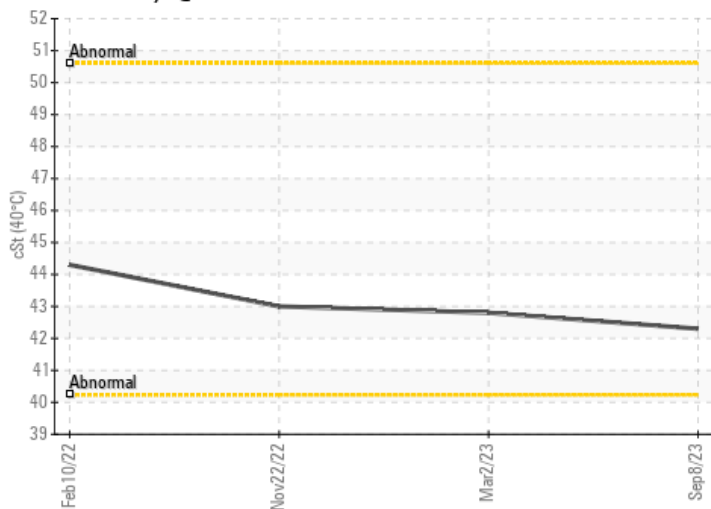
● Ferrous Alloys



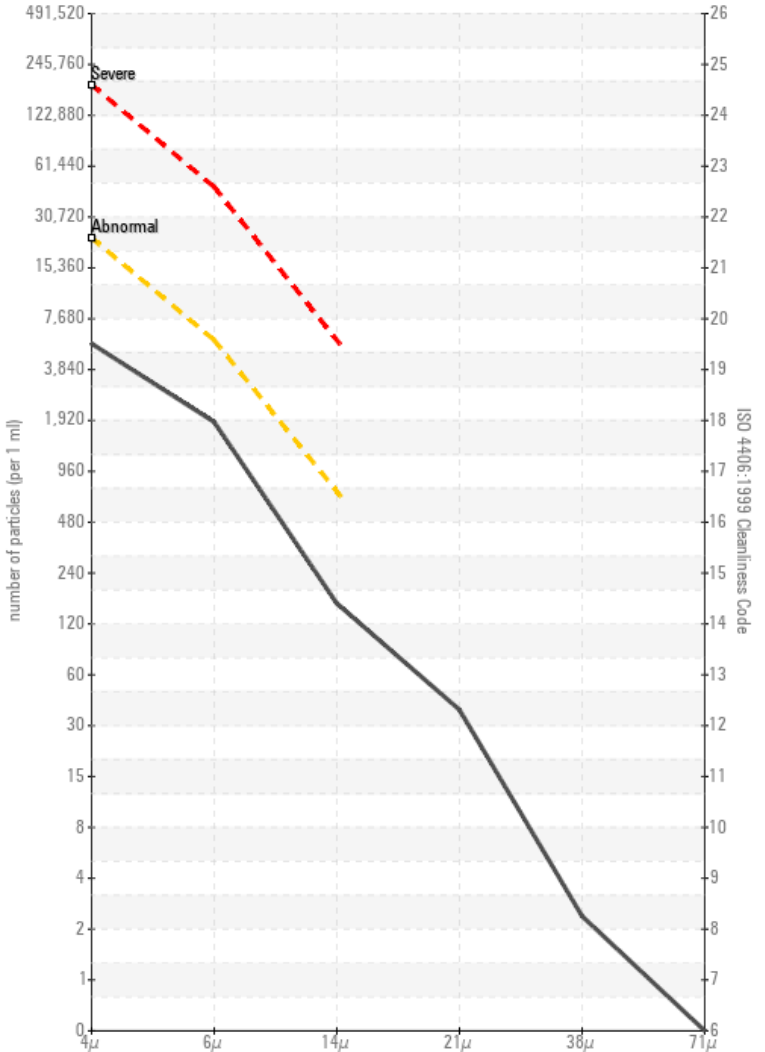
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

