

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50M 1216-108671 - Hydraulic System

Sample No: LH0268410

Oil Type: LIEBHERR HYDRAULIC HVI



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Sample Information

Sample Number	LH0268410	LH0258880	LH0258757	LH0272498
Sample Date	14 Jun 2024	05 Apr 2024	23 Feb 2024	17 Jan 2024
Machine Hours	21235	20592	20036	19562
Oil Hours	0	0	0	0
Oil Changed	Not Changd	Not Changd	Not Changd	Not Changd
Sample Status	ATTENTION	NORMAL	NORMAL	NORMAL



Oil Condition

Visc @ 40°C	cSt	32.0	41.5	41.8	41.49
Acid Number (AN)	mg KOH/g	0.62	0.63	0.65	1.27



Contamination

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		1738	2203	396	1254
Particles >6µm		416	473	76	248
Particles >14µm		16	40	6	14
ISO 4406:1999 (c)		18/16/11	18/16/12	16/13/10	17/15/11
Silicon	ppm	2	2	1	1
Sodium	ppm	1	<1	1	2
Potassium	ppm	2	1	2	<1



Wear Metals

Iron	ppm	45	42	41	36
Copper	ppm	4	4	4	3
Lead	ppm	1	2	0	2
Tin	ppm	<1	<1	0	1
Aluminum	ppm	3	2	2	<1
Chromium	ppm	2	2	<1	1
Molybdenum	ppm	2	3	1	1
Nickel	ppm	<1	<1	0	<1
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	<1	0	0	0
Manganese	ppm	1	1	0	<1
Vanadium	ppm	<1	<1	0	<1



Additives

Calcium	ppm	526	579	567	585
Magnesium	ppm	14	18	15	12
Zinc	ppm	545	550	580	625
Phosphorus	ppm	435	450	423	470
Barium	ppm	1	1	0	0
Boron	ppm	4	4	3	5

Diagnosis

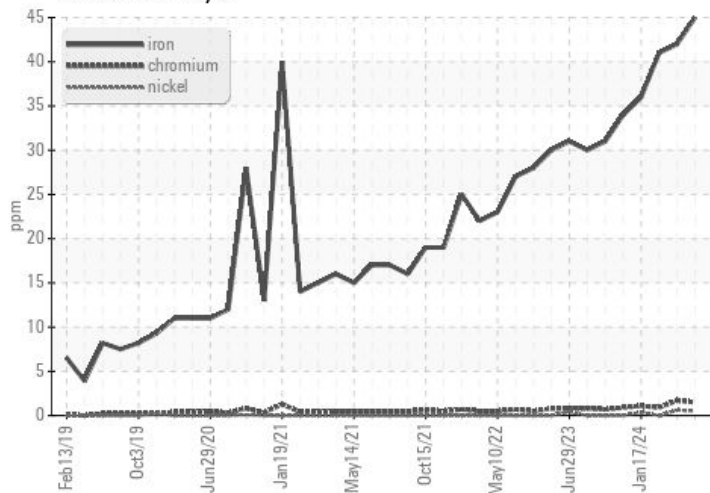
Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 32 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

Depot: LEC0008
 Unique No: 11096945
 Signed: Don Baldrige
 Report Date: 26 Jun 2024

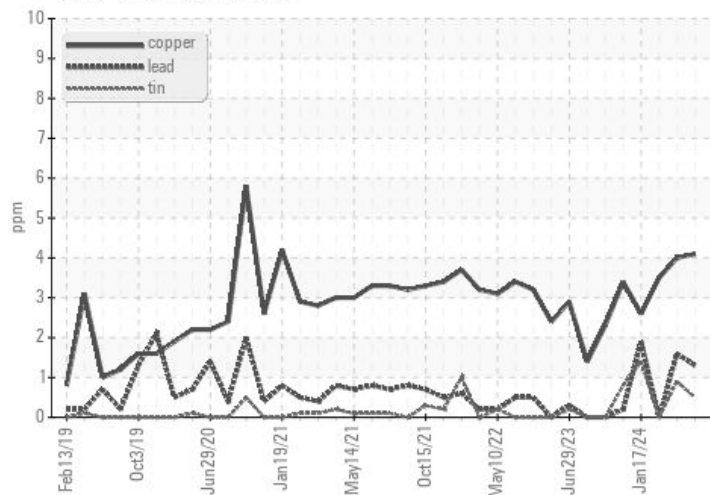


Graphs

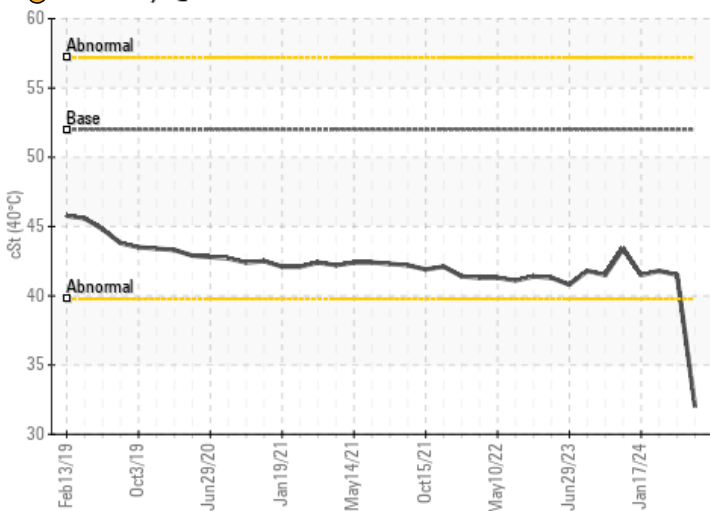
Ferrous Alloys



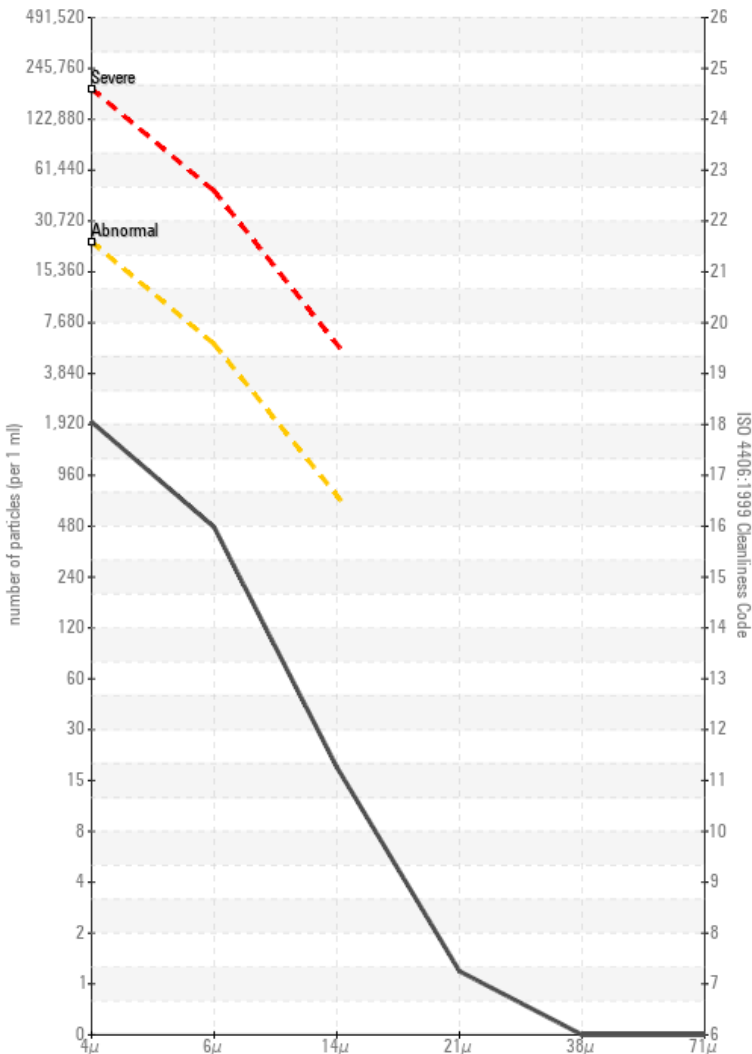
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

