

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH40M 124711-1215 - Hydraulic System

Sample No: LH0253933

Oil Type: LIEBHERR



AMERICAN STATE EQUIPMENT CO.
 2400 NORTH 14TH AVENUE
 WAUSAU, WI
 US 54401
 Contact: CHRIS BARTNIK
 cbartnik@amstate.com
 T: (715)675-6900
 F: (715)675-9748



SAMPLE INFORMATION

Sample Number	LH0253933	LH0253918	LH0236481	LH0236483
Sample Date	26 Sep 2023	12 Jul 2023	21 Apr 2023	07 Feb 2023
Machine Hours	4000	3502	3125	2507
Oil Hours	0	0	3125	2507
Oil Changed	Not Changd	Not Changd	Not Changd	Not Changd
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL



OIL CONDITION

Visc @ 40°C	cSt	42.2	41.8	41.8	42.1
Acid Number (AN)	mg KOH/g	1.12	1.16	0.14	0.98



CONTAMINATION

Particles >4µm		13565	442	777	778
Particles >6µm		3674	131	226	153
Particles >14µm		266	16	17	13
ISO 4406:1999 (c)		21/19/15	16/14/11	17/15/11	17/14/11
Silicon	ppm	<1	<1	3	1
Sodium	ppm	2	3	4	2
Potassium	ppm	0	0	4	0



WEAR METALS

Iron	ppm	22	16	23	15
Copper	ppm	2	3	4	3
Lead	ppm	<1	0	2	1
Tin	ppm	0	0	<1	<1
Aluminum	ppm	0	<1	1	1
Chromium	ppm	0	0	<1	<1
Molybdenum	ppm	0	0	0	<1
Nickel	ppm	0	0	<1	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1350	1461	1442	1384
Magnesium	ppm	10	5	7	6
Zinc	ppm	697	742	735	686
Phosphorus	ppm	607	625	610	549
Barium	ppm	0	0	0	0
Boron	ppm	0	0	0	0

Diagnosis

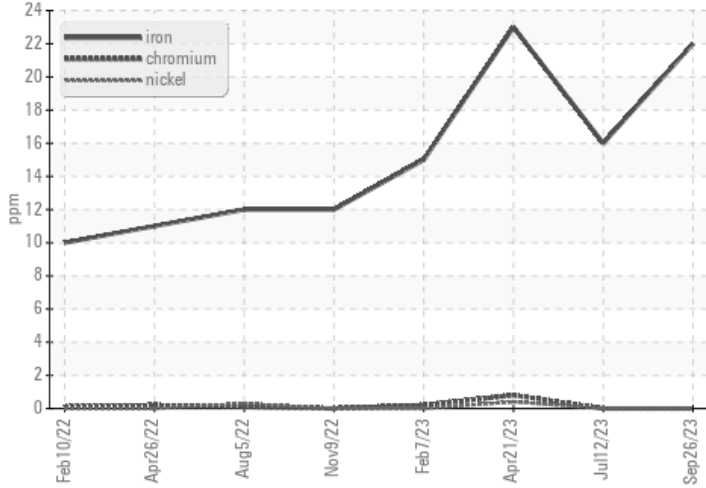
Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Depot: LEC0008
 Unique No: 10735964
 Signed: Wes Davis
 Report Date: 09 Nov 2023

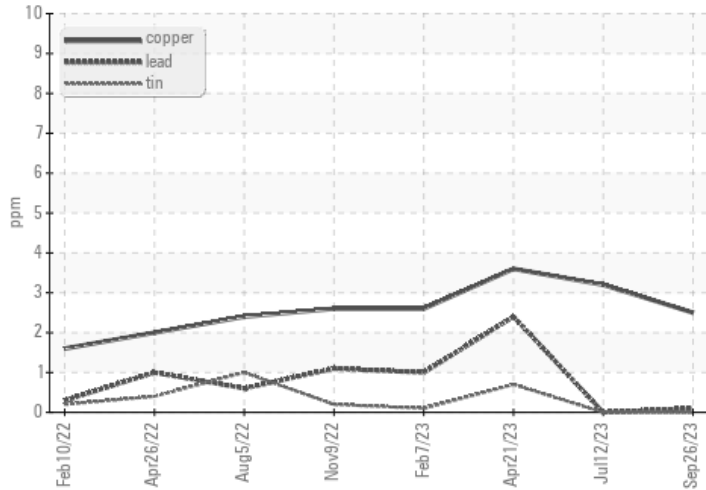


GRAPHS

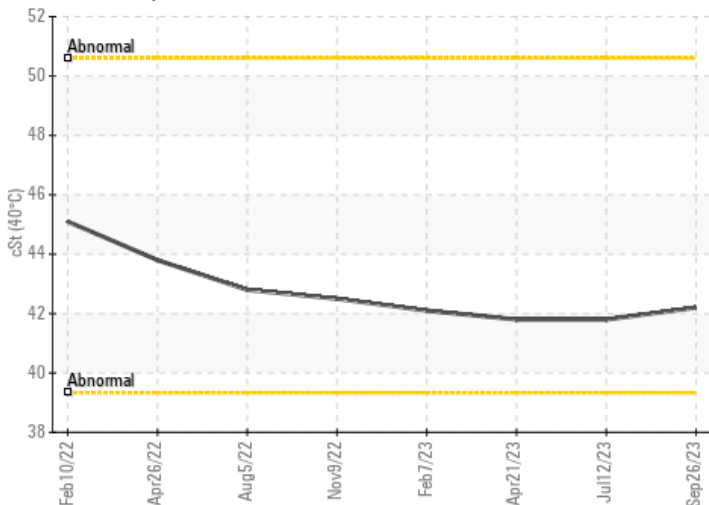
Ferrous Alloys



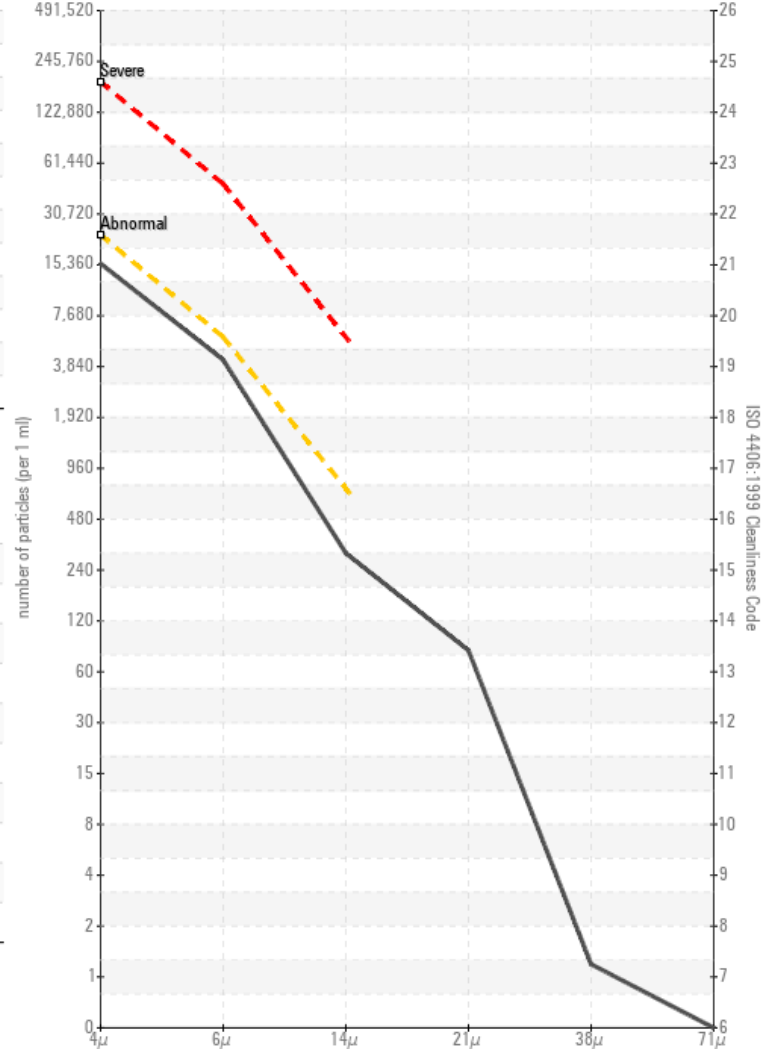
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

