

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50M 1216-108671 - Hydraulic System

Sample No: LH0263995

Oil Type: LIEBHERR HYDRAULIC HVI



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	LH0263995	LH0272540	LH0263879	LH0263828
Sample Date	14 Dec 2023	01 Nov 2023	05 Sep 2023	29 Jun 2023
Machine Hours	19125	18598	17864	17296
Oil Hours	0	0	0	0
Oil Changed	Not Changd	Not Changd	Not Changd	Not Changd
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL



OIL CONDITION

Visc @ 40°C	cSt	43.4	41.5	41.8	40.8
Acid Number (AN)	mg KOH/g	0.68	0.72	0.65	0.72



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		1993	1621	777	171
Particles >6µm		377	507	155	50
Particles >14µm		22	34	11	5
ISO 4406:1999 (c)		18/16/12	18/16/12	17/14/11	15/13/10
Silicon	ppm	<1	<1	<1	<1
Sodium	ppm	4	2	2	<1
Potassium	ppm	0	0	0	1



WEAR METALS

Iron	ppm	34	31	30	31
Copper	ppm	3	2	1	3
Lead	ppm	<1	0	0	<1
Tin	ppm	<1	0	0	<1
Aluminum	ppm	0	0	0	0
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	1	<1	0	2
Nickel	ppm	0	0	0	<1
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	518	522	558	605
Magnesium	ppm	2	14	17	13
Zinc	ppm	506	534	565	561
Phosphorus	ppm	405	446	348	437
Barium	ppm	0	0	0	0
Boron	ppm	3	3	3	3

Diagnosis

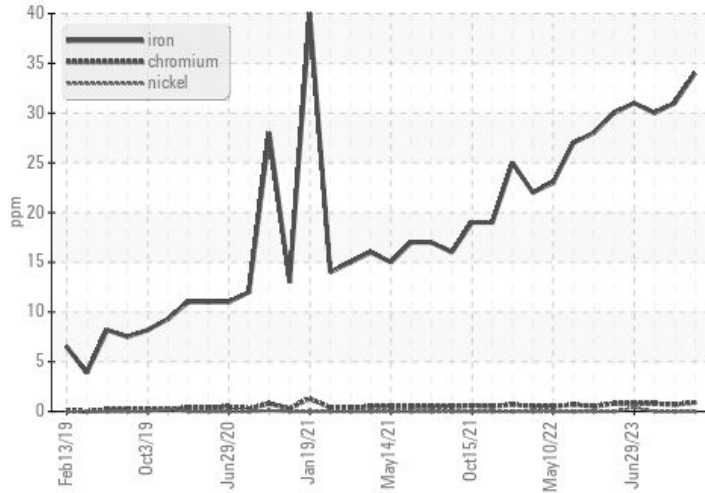
Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for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

Depot: LEC0008
 Unique No: 10806091
 Signed: Don Baldrige
 Report Date: 28 Dec 2023

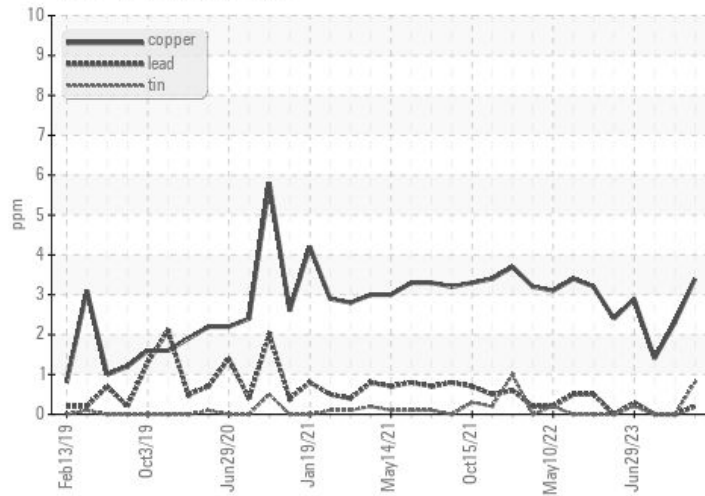


GRAPHS

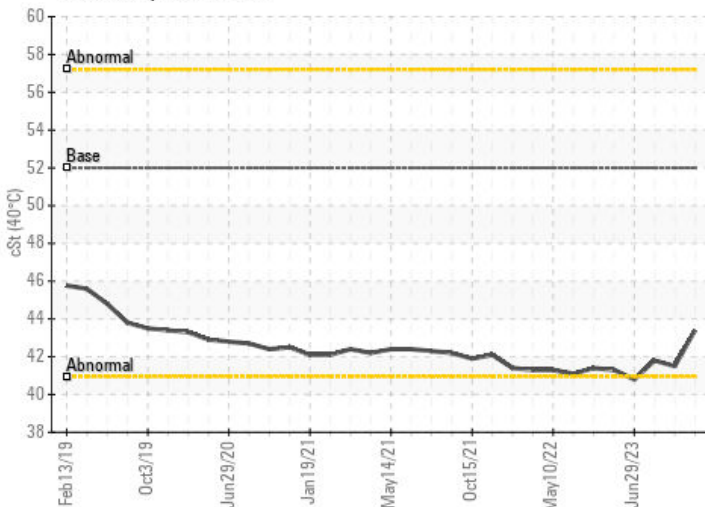
Ferrous Alloys



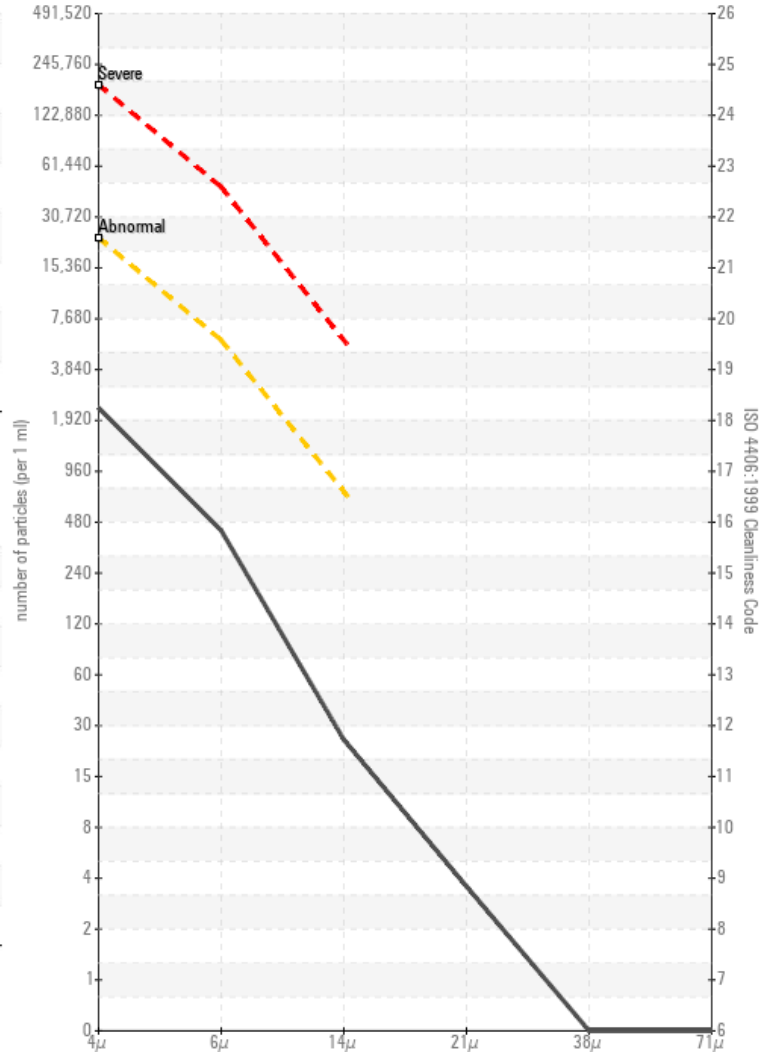
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

