

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50M 1216-109299 - Hydraulic System

Sample No: LH0272565

Oil Type: LIEBHERR HYDRAULIC HVI



SAMPLE INFORMATION

Sample Number	LH0272565	LH0263976	LH0264381	LH0200314
Sample Date	19 Jan 2024	19 Oct 2023	21 Jul 2023	20 Apr 2023
Machine Hours	9018	8565	8127	7653
Oil Hours	0	0	0	0
Oil Changed	Not Changd	Not Changd	Not Changd	Not Changd
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

ALTER METAL
2900 SHERMAN STREET
WAUSAU, WI
US 54401
Contact: Service Manager



OIL CONDITION

Visc @ 40°C	cSt	42.4	42.8	43.2	42.5
Acid Number (AN)	mg KOH/g	1.27	1.35	1.34	1.39

T:
F:



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		7894	790	2345	1776
Particles >6µm		1452	168	270	443
Particles >14µm		49	22	13	28
ISO 4406:1999 (c)		20/18/13	17/15/12	18/15/11	18/16/12
Silicon	ppm	4	3	4	4
Sodium	ppm	4	3	3	0
Potassium	ppm	0	0	<1	2

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.



WEAR METALS

Iron	ppm	10	10	10	10
Copper	ppm	2	2	2	2
Lead	ppm	<1	0	<1	<1
Tin	ppm	<1	0	0	0
Aluminum	ppm	1	0	0	0
Chromium	ppm	<1	<1	<1	1
Molybdenum	ppm	44	43	48	47
Nickel	ppm	0	0	0	0
Titanium	ppm	<1	0	0	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	0	<1	<1
Vanadium	ppm	0	0	<1	0



ADDITIVES

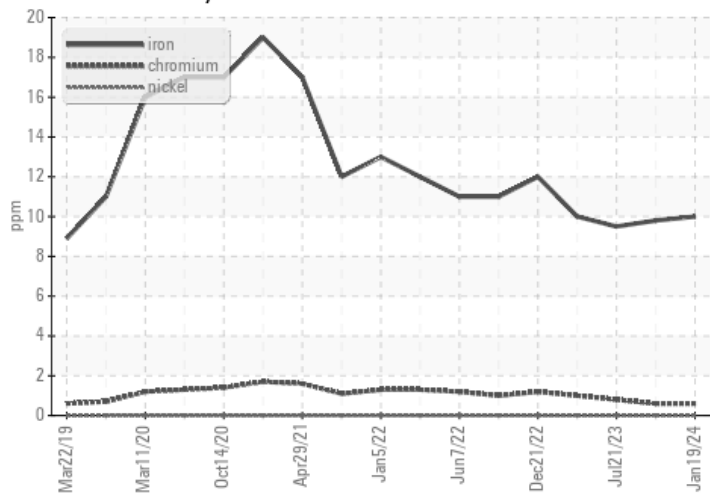
Calcium	ppm	2808	2613	2806	2780
Magnesium	ppm	124	115	142	126
Zinc	ppm	1127	1059	1171	1137
Phosphorus	ppm	1020	947	1008	1008
Barium	ppm	0	0	0	0
Boron	ppm	48	52	56	54

Depot: ALTWAUUS
Unique No: 10846674
Signed: Don Baldrige
Report Date: 26 Jan 2024

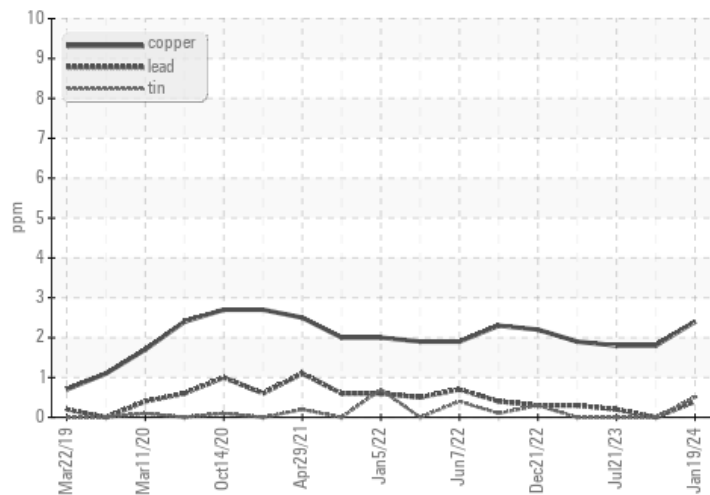


GRAPHS

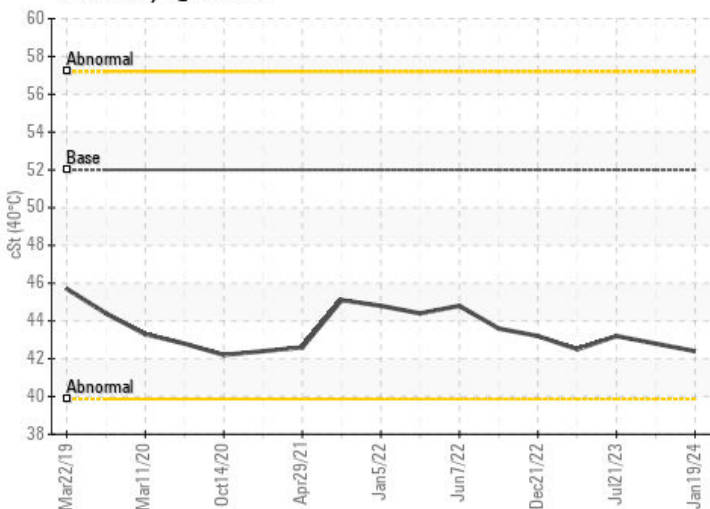
Ferrous Alloys



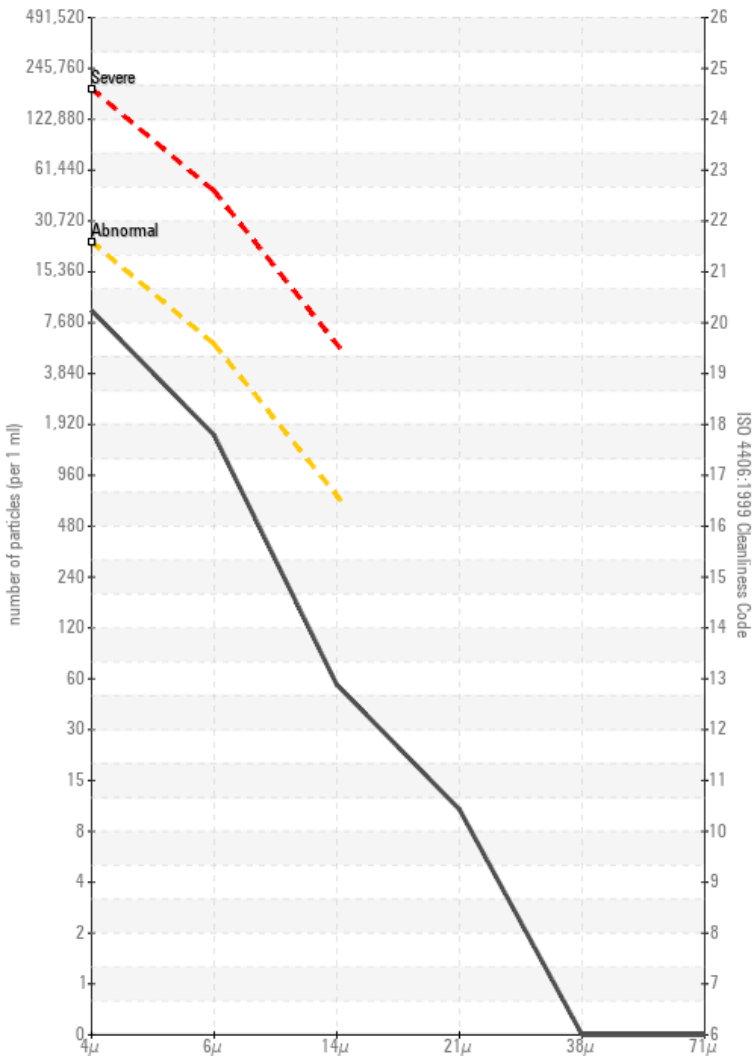
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

