

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH50M 1216-109299 - Hydraulic System

Sample No: LH0264793

Oil Type: LIEBHERR HYDRAULIC HVI



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



#### Sample Information

Sample Number	LH0264793	LH0272565	LH0263976	LH0264381
Sample Date	11 Apr 2024	19 Jan 2024	19 Oct 2023	21 Jul 2023
Machine Hours	9469	9018	8565	8127
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	42.3	42.4	42.8	43.2
Acid Number (AN)	mg KOH/g	1.41	1.27	1.35	1.34



#### Contamination

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		780	7894	790	2345
Particles >6µm		83	1452	168	270
Particles >14µm		10	49	22	13
ISO 4406:1999 (c)		17/14/10	20/18/13	17/15/12	18/15/11
Silicon	ppm	5	4	3	4
Sodium	ppm	<1	4	3	3
Potassium	ppm	2	0	0	<1



#### Wear Metals

Iron	ppm	11	10	10	10
Copper	ppm	3	2	2	2
Lead	ppm	1	<1	0	<1
Tin	ppm	<1	<1	0	0
Aluminum	ppm	2	1	0	0
Chromium	ppm	1	<1	<1	<1
Molybdenum	ppm	44	44	43	48
Nickel	ppm	<1	0	0	0
Titanium	ppm	<1	<1	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	0	<1
Vanadium	ppm	<1	0	0	<1



#### Additives

Calcium	ppm	2838	2808	2613	2806
Magnesium	ppm	119	124	115	142
Zinc	ppm	1153	1127	1059	1171
Phosphorus	ppm	1056	1020	947	1008
Barium	ppm	2	0	0	0
Boron	ppm	53	48	52	56

T:  
F:

#### Diagnosis

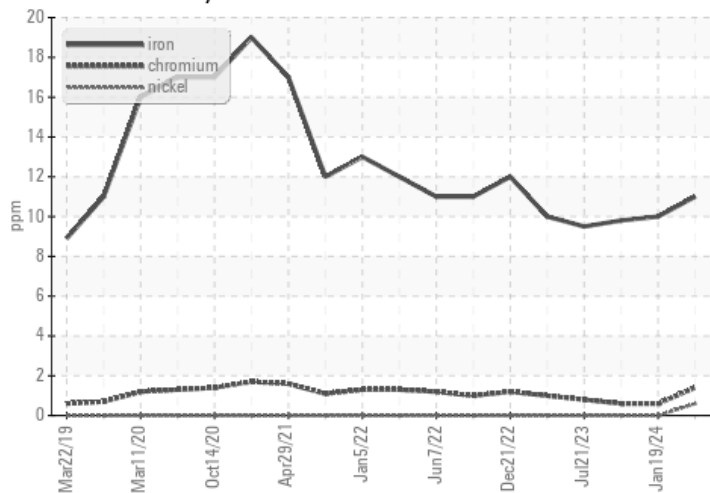
Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for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

Depot: ALTWAUUS  
Unique No: 10989187  
Signed: Angela Borella  
Report Date: 23 Apr 2024

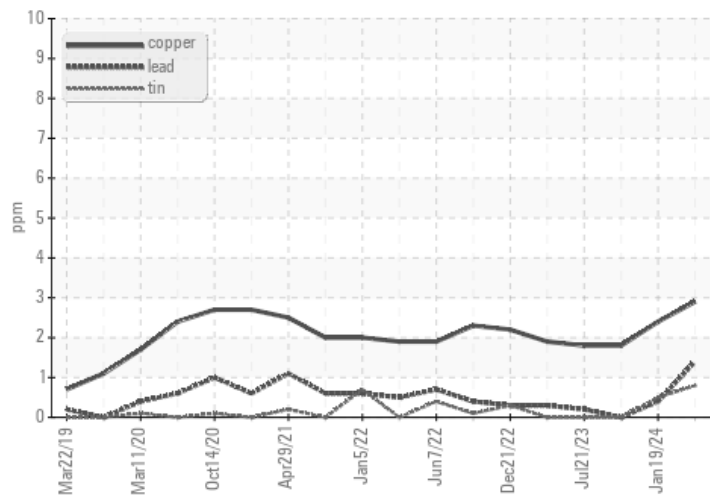


### Graphs

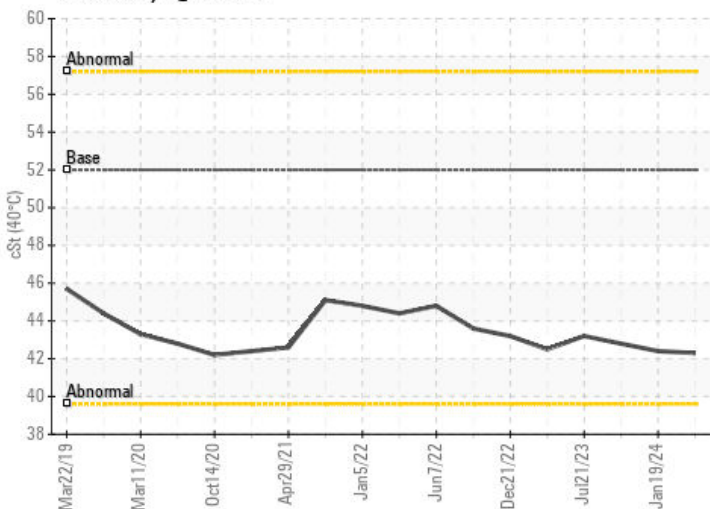
#### Ferrous Alloys



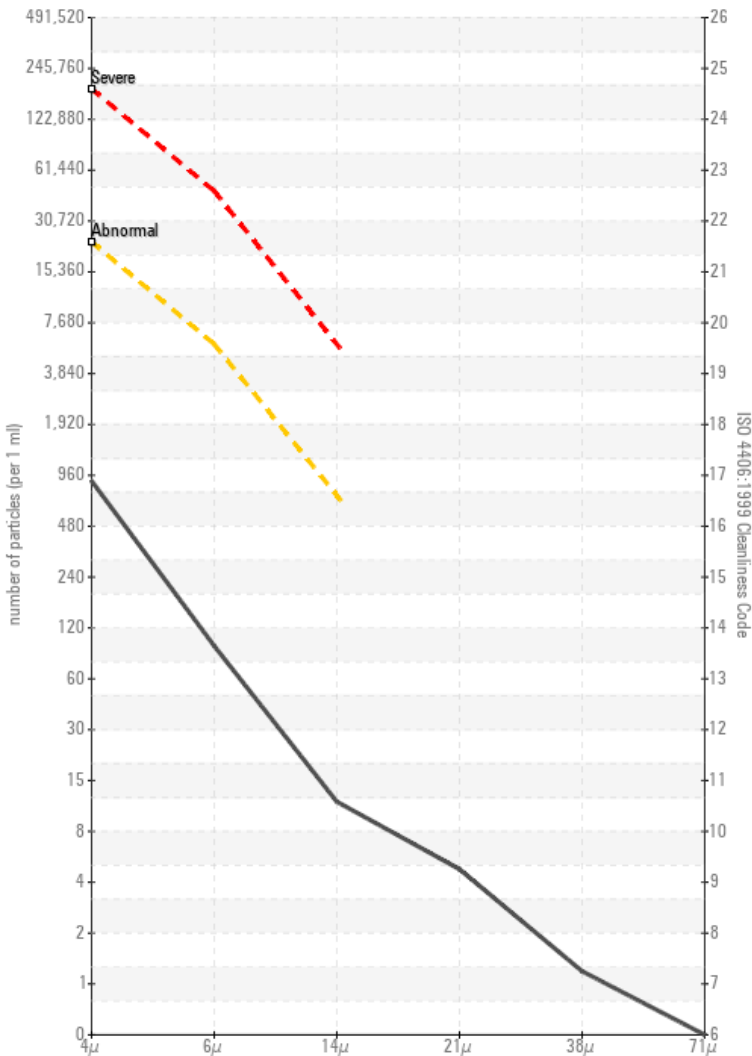
#### Non-ferrous Metals



#### Viscosity @ 40°C



#### Particle Count



#### Acid Number

