

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH50 142548-1216 - Hydraulic System

Sample No: LH0264769

Oil Type: LIEBHERR HYDRAULIC HVI



**AMERICAN STATE EQUIPMENT CO.**  
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#### Sample Information

Sample Number	LH0264769	LH0258839	LH0272484	LH0254816
Sample Date	20 May 2024	15 Feb 2024	30 Oct 2023	20 Jul 2023
Machine Hours	3013	2537	1993	1493
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	41.7	42.2	42.4	42.7
Acid Number (AN)	mg KOH/g	1.13	1.16	1.26	1.43



#### Contamination

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		1618	1728	811	2867
Particles >6µm		95	202	122	848
Particles >14µm		8	21	11	66
ISO 4406:1999 (c)		18/14/10	18/15/12	17/14/11	19/17/13
Silicon	ppm	4	3	4	2
Sodium	ppm	2	2	2	2
Potassium	ppm	0	0	0	0



#### Wear Metals

Iron	ppm	14	15	15	12
Copper	ppm	2	2	2	2
Lead	ppm	0	0	0	0
Tin	ppm	0	0	0	0
Aluminum	ppm	<1	0	<1	<1
Chromium	ppm	0	0	<1	<1
Molybdenum	ppm	12	12	13	15
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	0	<1	<1
Vanadium	ppm	0	0	0	0



#### Additives

Calcium	ppm	1773	1828	1783	1987
Magnesium	ppm	37	28	39	42
Zinc	ppm	841	807	818	908
Phosphorus	ppm	748	717	762	784
Barium	ppm	0	0	0	0
Boron	ppm	12	10	12	12

#### Diagnosis

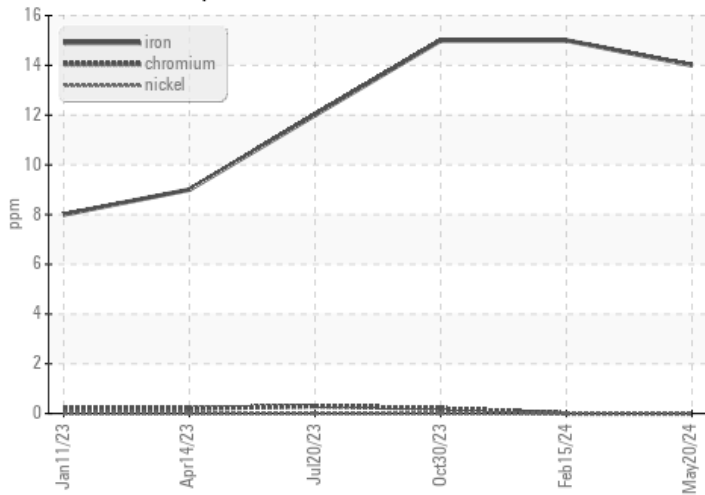
Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further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

Depot: LEC0008  
 Unique No: 11047728  
 Signed: Wes Davis  
 Report Date: 29 May 2024

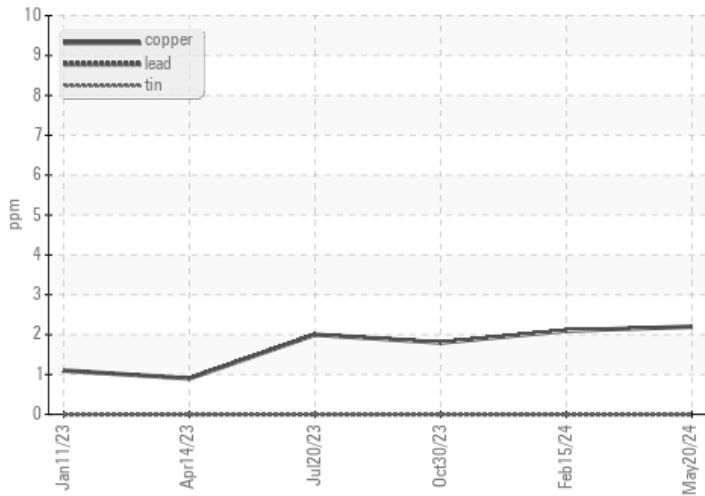


### Graphs

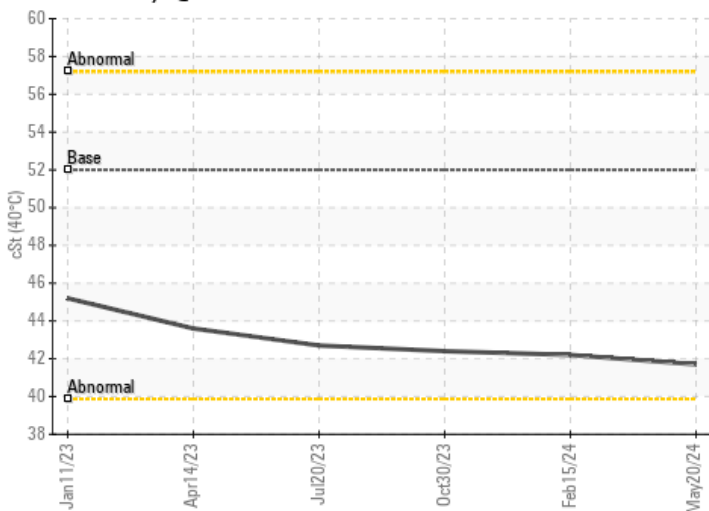
#### Ferrous Alloys



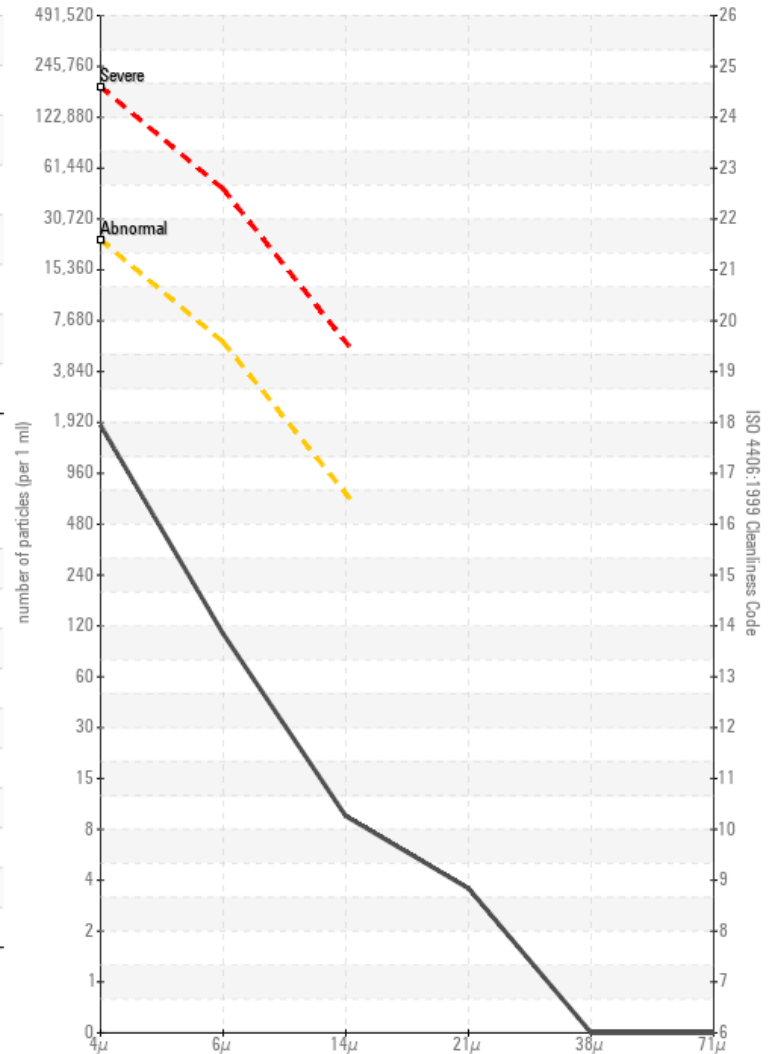
#### Non-ferrous Metals



#### Viscosity @ 40°C



#### Particle Count



#### Acid Number

