

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH30M 121854-1253 - Hydraulic System

Sample No: LH0264390

Oil Type: GEAR OIL LS 80W90



**AMERICAN STATE EQUIPMENT CO.**  
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#### SAMPLE INFORMATION

Sample Number	LH0264390	LH0254775	LH0207794	LH0221014
Sample Date	04 Aug 2023	02 Jun 2023	27 Feb 2023	05 Dec 2022
Machine Hours	6007	5547	4659	3974
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	46.9	44.8	45.8	44.4
Acid Number (AN)	mg KOH/g	0.86	0.87	0.94	1.00



#### CONTAMINATION

Particles >4µm		749	3224	2370	465
Particles >6µm		92	789	753	112
Particles >14µm		15	52	50	8
ISO 4406:1999 (c)		17/14/11	19/17/13	18/17/13	16/14/10
Silicon	ppm	<1	<1	1	0
Sodium	ppm	2	2	1	3
Potassium	ppm	0	0	1	0



#### WEAR METALS

Iron	ppm	19	41	23	26
Copper	ppm	1	3	3	4
Lead	ppm	0	0	<1	<1
Tin	ppm	0	0	0	0
Aluminum	ppm	0	<1	1	<1
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	0	0	0	0
Nickel	ppm	0	0	0	0
Titanium	ppm	0	<1	0	0
Silver	ppm	0	0	<1	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	<1	0	0



#### ADDITIVES

Calcium	ppm	900	1404	1207	1290
Magnesium	ppm	3	4	5	6
Zinc	ppm	433	537	508	599
Phosphorus	ppm	395	496	442	553
Barium	ppm	0	0	0	0
Boron	ppm	0	0	0	0

#### Diagnosis

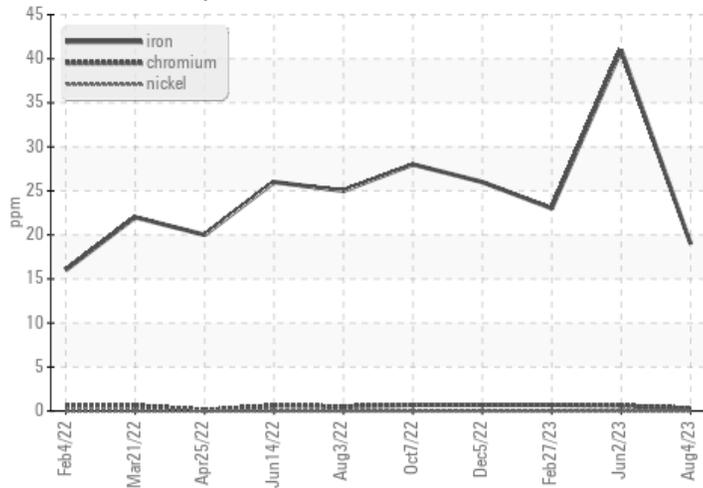
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. Confirm oil type. The AN level is acceptable for this fluid. The condition of the oil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

Depot: LEC0008  
 Unique No: 10604091  
 Signed: Don Baldrige  
 Report Date: 15 Aug 2023

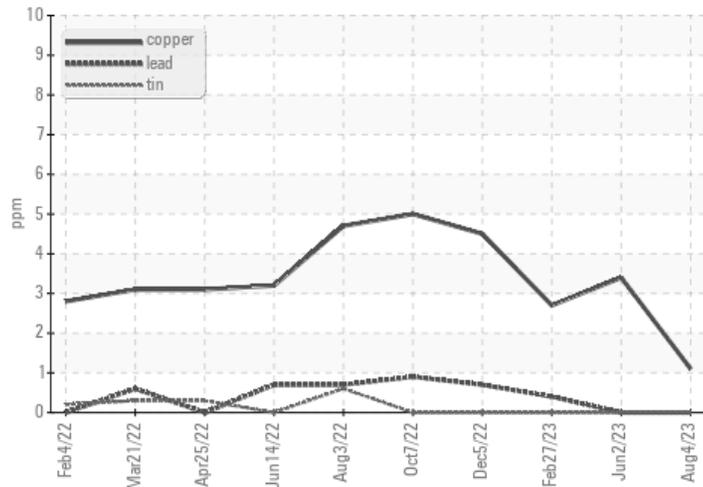


### GRAPHS

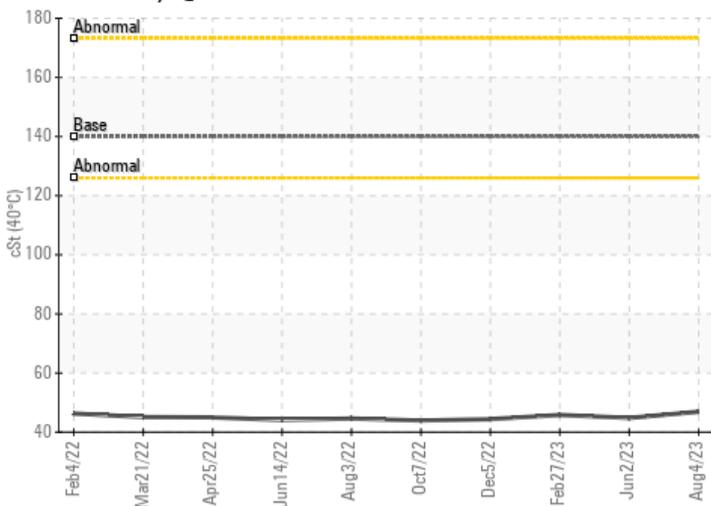
#### Ferrous Alloys



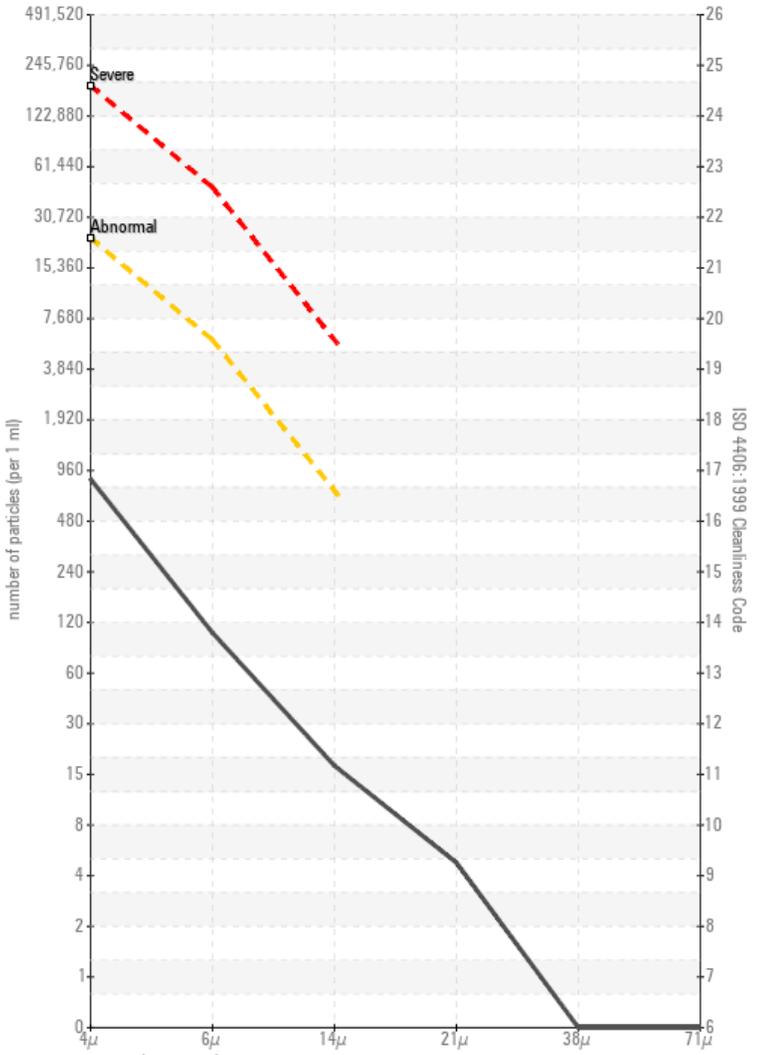
#### Non-ferrous Metals



#### Viscosity @ 40°C



#### Particle Count



#### Acid Number

