

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### [[S20230323040221]] LIEBHERR TA230 7369 - Hydraulic Sy

Sample No: LH06059244

Oil Type: AW HYDRAULIC OIL ISO 68



#### SAMPLE INFORMATION

Sample Number	LH06059244	---	---	---
Sample Date	29 Dec 2023	---	---	---
Machine Hours	2227	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

#### HEAVY MACHINES INC.

3930 EAST RAINES RD  
MEMPHIS, TN  
US 38118  
Contact: J. DAVIS  
JDAVIS@HEAVY.LLC.COM  
T:  
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#### OIL CONDITION

Visc @ 40°C	cSt	● 47.8	---	---	---
Acid Number (AN)	mg KOH/g	● 1.22	---	---	---



#### CONTAMINATION

Water	%	NEG	---	---	---
Particles >4µm		● 98489	---	---	---
Particles >6µm		● 21294	---	---	---
Particles >14µm		● 241	---	---	---
ISO 4406:1999 (c)		24/22/15	---	---	---
Silicon	ppm	● 3	---	---	---
Sodium	ppm	● <1	---	---	---
Potassium	ppm	● 0	---	---	---

#### Diagnosis

The oil change at the time of sampling has been noted. We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.



#### WEAR METALS

Iron	ppm	● 2	---	---	---
Copper	ppm	● 3	---	---	---
Lead	ppm	● <1	---	---	---
Tin	ppm	● 0	---	---	---
Aluminum	ppm	● 0	---	---	---
Chromium	ppm	● 0	---	---	---
Molybdenum	ppm	● 0	---	---	---
Nickel	ppm	● 0	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	● 0	---	---	---
Vanadium	ppm	0	---	---	---



#### ADDITIVES

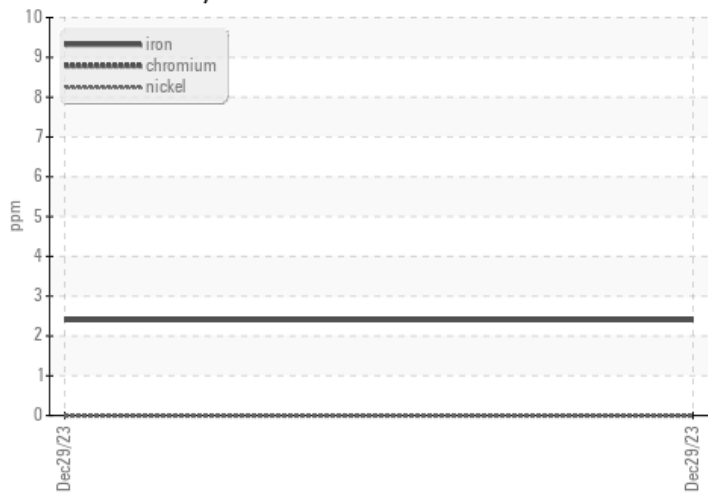
Calcium	ppm	● 1423	---	---	---
Magnesium	ppm	● 2	---	---	---
Zinc	ppm	● 717	---	---	---
Phosphorus	ppm	● 640	---	---	---
Barium	ppm	● 0	---	---	---
Boron	ppm	● 0	---	---	---

Depot: LEC0051  
Unique No: 10830626  
Signed: Don Baldrige  
Report Date: 15 Jan 2024

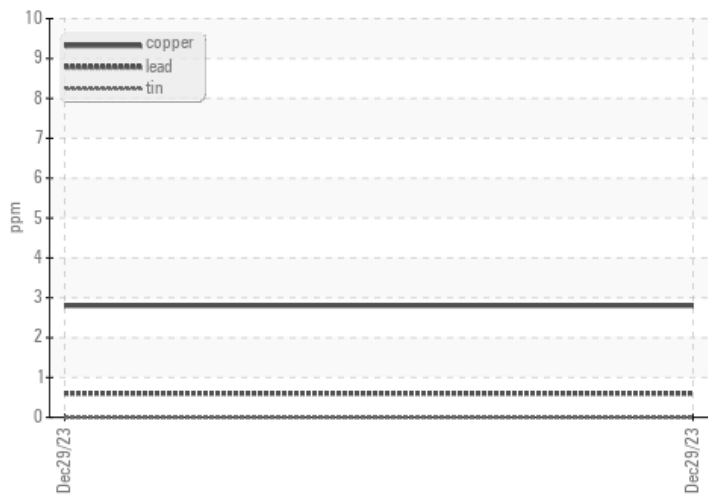


### GRAPHS

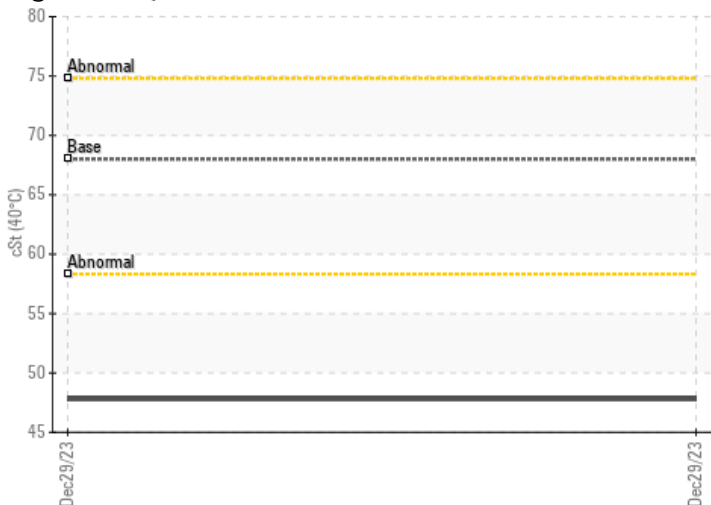
#### Ferrous Alloys



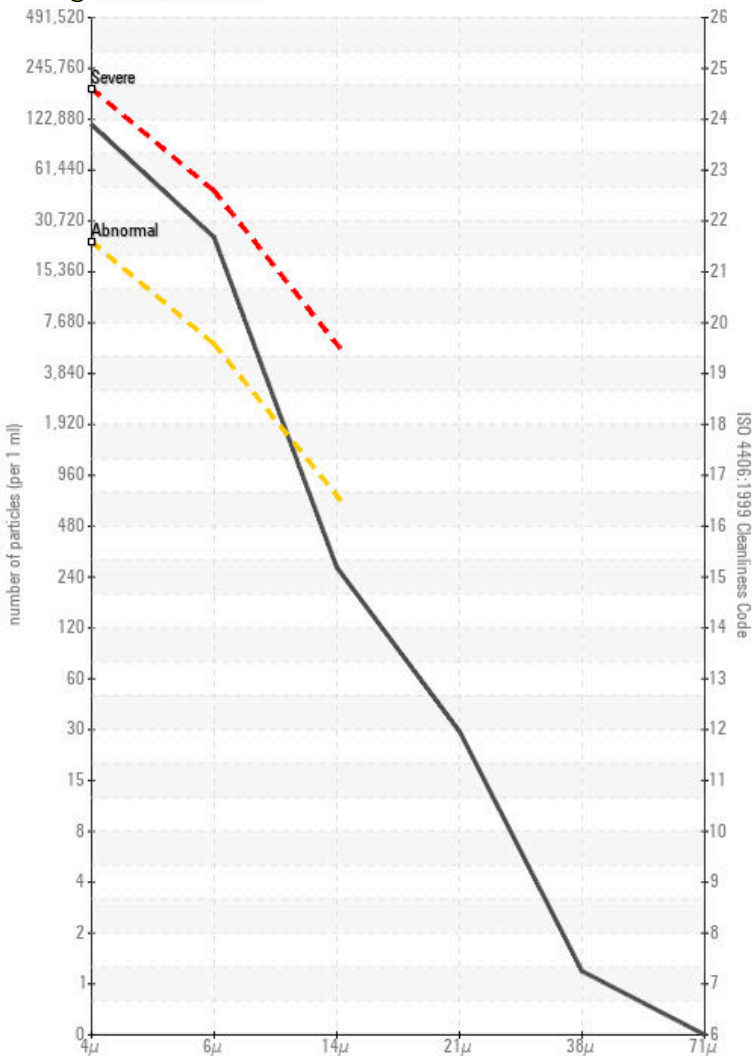
#### Non-ferrous Metals



#### Viscosity @ 40°C



#### Particle Count



#### Acid Number

