LIEBHERR
CONSTRUCTION EQUIPMENT

LIEBHERR LTM1090-4.2 089274 - Hydraulic System

Sample No: LH0258660

Oil Type: LIEBHERR HYDRAULIC 37

Sample Information

Sample Number		**LH0258660**	---	---	---
Sample Date		**28 May 2024**	---	---	---
Machine Hours		**20437**	---	---	---
Oil Hours		**0**	---	---	---
Oil Changed		**Changed**	---	---	---
Sample Status		**ABNORMAL**	---	---	---

Oil Condition

Visc @ 40°C	cSt	**35.2**	---	---	---
Acid Number (AN)	mg KOH/g	**0.25**	---	---	---

Contamination

Water	%	**NEG**	---	---	---
Particles >4µm		**39815**	---	---	---
Particles >6µm		**11523**	---	---	---
Particles >14µm		**1917**	---	---	---
ISO 4406:1999 (c)		**22/21/18**	---	---	---
Silicon	ppm	**2**	---	---	---
Sodium	ppm	**2**	---	---	---
Potassium	ppm	**<1**	---	---	---

Wear Metals

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

Additives

Calcium	ppm	**96**	---	---	---
Magnesium	ppm	**3**	---	---	---
Zinc	ppm	**283**	---	---	---
Phosphorus	ppm	**241**	---	---	---
Barium	ppm	**0**	---	---	---
Boron	ppm	**0**	---	---	---

LIEBHERR USA CO - MOBILE AND CRAWLER CRANES
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F:

Diagnosis

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.All component wear rates are normal. There is a moderate amount of particulates (2 to 100 microns in size) present in the oil. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Depot: LIENEW
Unique No: 11062857
Signed: Wes Davis
Report Date: 06 Jun 2024

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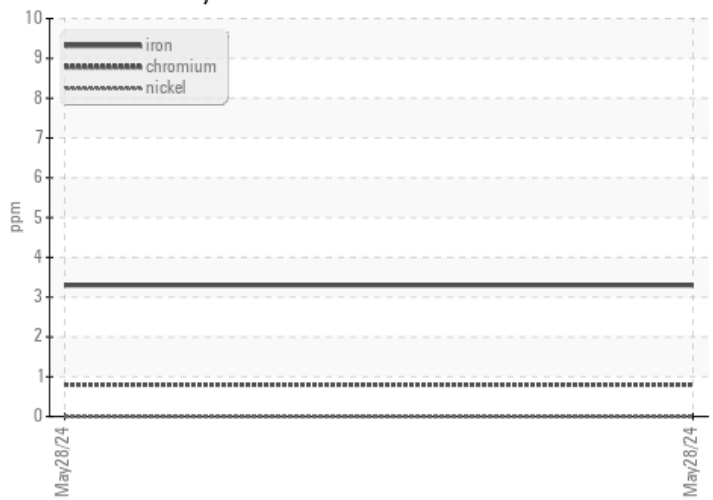
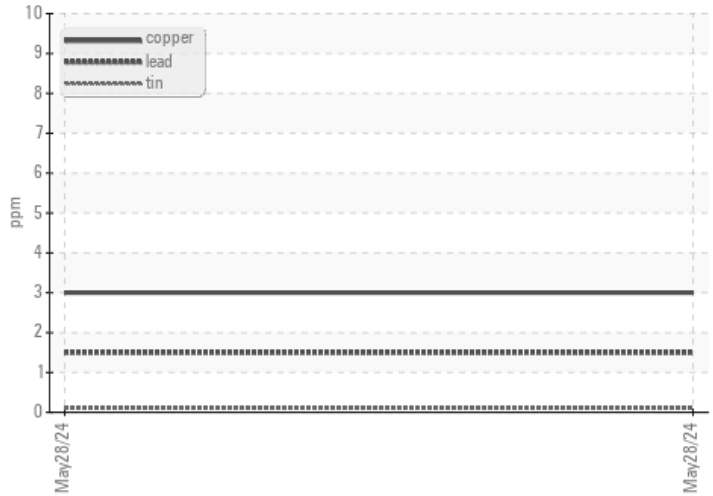
Graphs

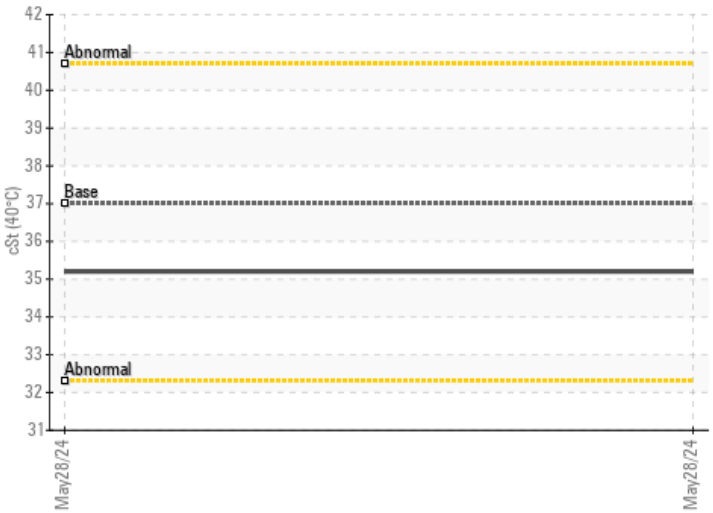
Ferrous Alloys



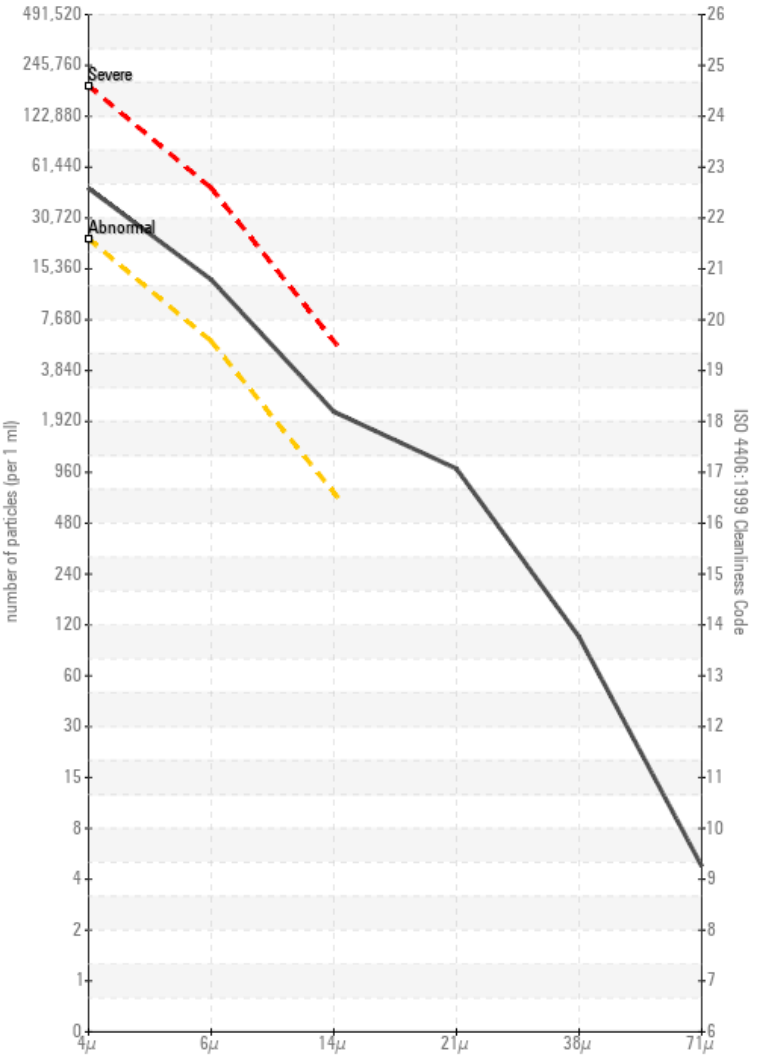
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number