

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH110 1227-155752 - Hydraulic System

Sample No: LH0280573

Oil Type: TDH



**KINDER MORGAN**  
4301 IVERSON  
TRINITY, AL  
US 35601  
Contact: CHIP OAKES

T: (256)350-0006  
F: (256)355-5250



#### SAMPLE INFORMATION

Sample Number	LH0280573	LH0280562	---	---
Sample Date	20 Feb 2024	11 Jan 2024	---	---
Machine Hours	1022	507	---	---
Oil Hours	0	0	---	---
Oil Changed	Not Changd	Not Changd	---	---
Sample Status	NORMAL	ABNORMAL	---	---



#### OIL CONDITION

Visc @ 40°C	cSt	● 44.2	● 45.1	---	---
Acid Number (AN)	mg KOH/g	● 1.16	● 1.17	---	---



#### CONTAMINATION

Water	%	NEG	NEG	---	---
Particles >4µm		● 6065	● 54035	---	---
Particles >6µm		● 1136	● 14882	---	---
Particles >14µm		● 55	● 616	---	---
ISO 4406:1999 (c)		20/17/13	23/21/16	---	---
Silicon	ppm	● 5	● 4	---	---
Sodium	ppm	● 2	● 0	---	---
Potassium	ppm	● 0	● 1	---	---



#### WEAR METALS

Iron	ppm	● 6	● 7	---	---
Copper	ppm	● 3	● 2	---	---
Lead	ppm	● 0	● 0	---	---
Tin	ppm	● 0	● 0	---	---
Aluminum	ppm	● 0	● 3	---	---
Chromium	ppm	● <1	● <1	---	---
Molybdenum	ppm	0	0	---	---
Nickel	ppm	● 0	● 0	---	---
Titanium	ppm	<1	0	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	<1	0	---	---
Vanadium	ppm	0	0	---	---



#### ADDITIVES

Calcium	ppm	1310	1370	---	---
Magnesium	ppm	2	8	---	---
Zinc	ppm	620	740	---	---
Phosphorus	ppm	598	655	---	---
Barium	ppm	0	0	---	---
Boron	ppm	0	0	---	---

#### Diagnosis

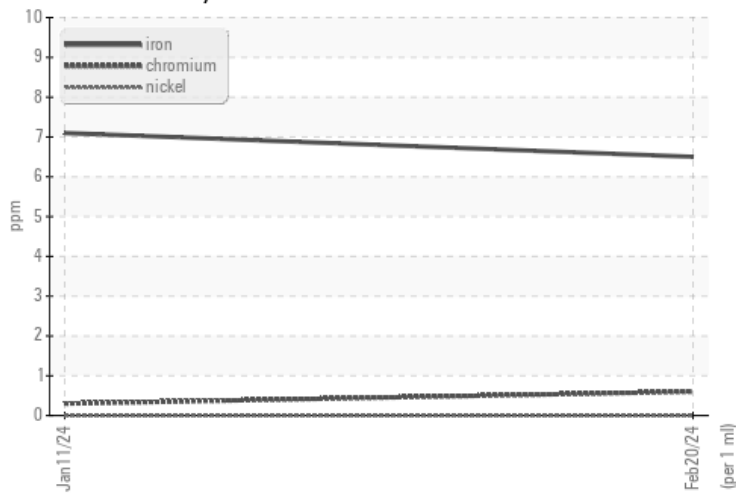
Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further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

**Depot:** KINTRI  
**Unique No:** 10898300  
**Signed:** Wes Davis  
**Report Date:** 27 Feb 2024

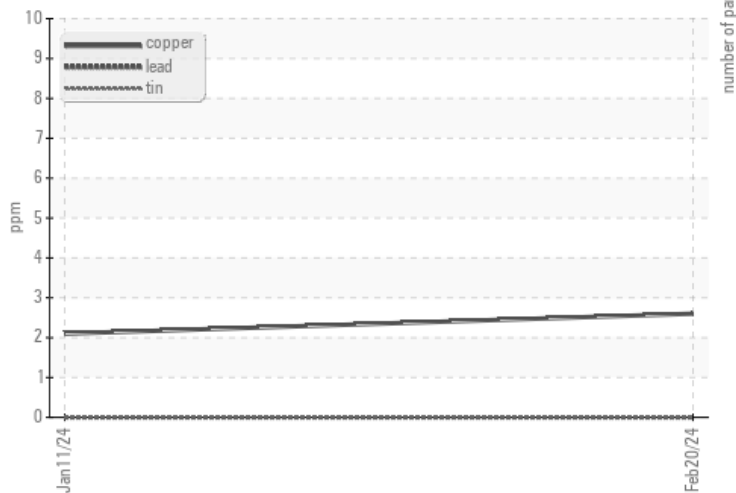


### GRAPHS

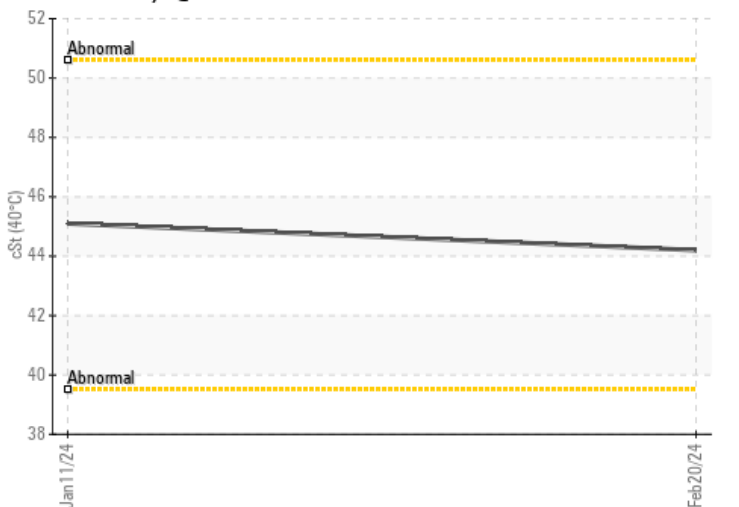
#### Ferrous Alloys



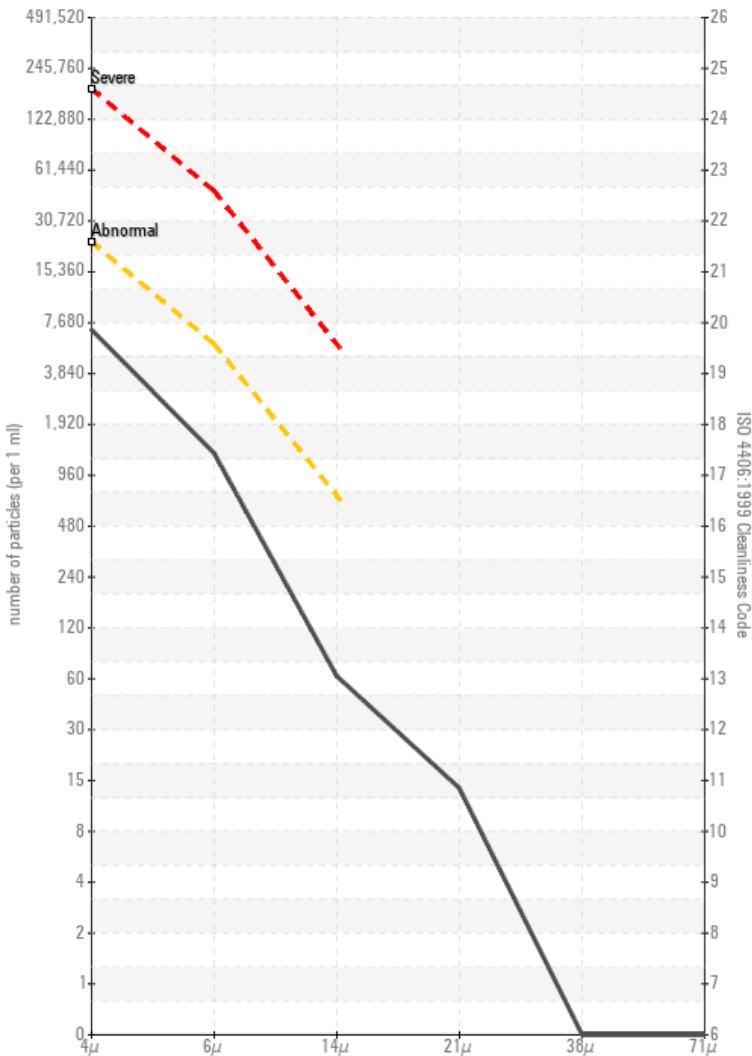
#### Non-ferrous Metals



#### Viscosity @ 40°C



#### Particle Count



#### Acid Number

