

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR R930 049615-1716 - Hydraulic System

Sample No: LH0243968

Oil Type: LIEBHERR HYDRAULIC HVI



**ACECO**  
10119 RESIDENCY ROAD  
MANASSAS, VA  
US 20110  
Contact: RON BROCK

T: (703)392-0111  
F: (703)331-5604

#### 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.



#### SAMPLE INFORMATION

Sample Number	LH0243968	LH0183111	---	---
Sample Date	12 Jun 2023	02 Oct 2020	---	---
Machine Hours	1685	522	---	---
Oil Hours	0	522	---	---
Oil Changed	Not Chngd	Not Chngd	---	---
Sample Status	NORMAL	NORMAL	---	---



#### OIL CONDITION

Visc @ 40°C	cSt	● 43.6	● 44.7	---	---
Acid Number (AN)	mg KOH/g	● 1.09	● 1.329	---	---



#### CONTAMINATION

Particles >4µm		● 11068	● 3933	---	---
Particles >6µm		● 2318	● 366	---	---
Particles >14µm		● 395	● 3	---	---
ISO 4406:1999 (c)		21/18/16	19/16/9	---	---
Silicon	ppm	● 5	● 4	---	---
Sodium	ppm	● 3	● 0	---	---
Potassium	ppm	● 0	● 1	---	---



#### WEAR METALS

Iron	ppm	● 9	● 8	---	---
Copper	ppm	● 5	● 3	---	---
Lead	ppm	● <1	● <1	---	---
Tin	ppm	● <1	● <1	---	---
Aluminum	ppm	● 2	● 0	---	---
Chromium	ppm	● 3	● 1	---	---
Molybdenum	ppm	● 0	● 0	---	---
Nickel	ppm	● 0	● 0	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	0	1	---	---
Manganese	ppm	● <1	● <1	---	---
Vanadium	ppm	<1	0	---	---



#### ADDITIVES

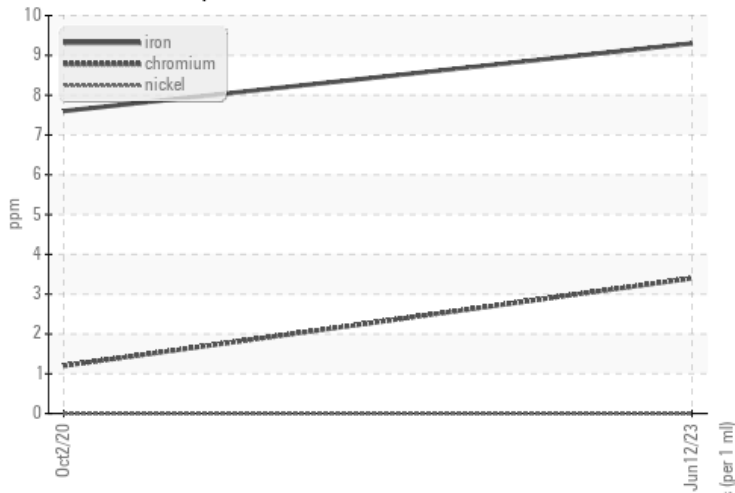
Calcium	ppm	● 1478	● 1368	---	---
Magnesium	ppm	● 1	● 5	---	---
Zinc	ppm	● 742	● 735	---	---
Phosphorus	ppm	● 605	● 645	---	---
Barium	ppm	● 0	● 0	---	---
Boron	ppm	● 0	● 2	---	---

**Depot:** ACEMAN  
**Unique No:** 10635722  
**Signed:** Wes Davis  
**Report Date:** 08 Sep 2023

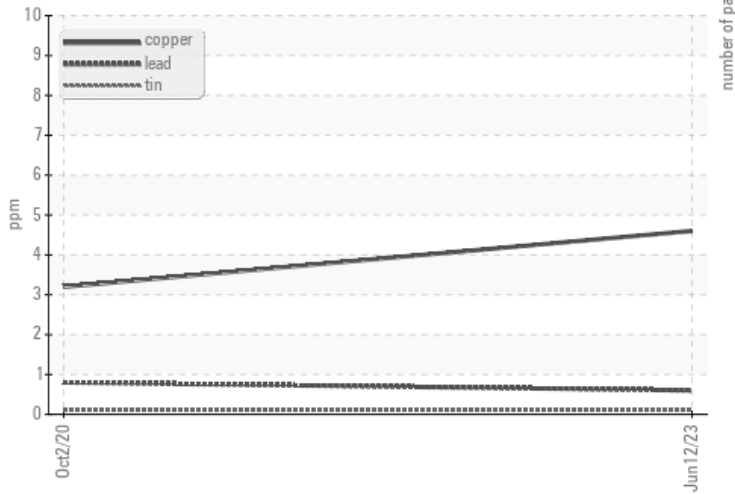


### GRAPHS

#### Ferrous Alloys



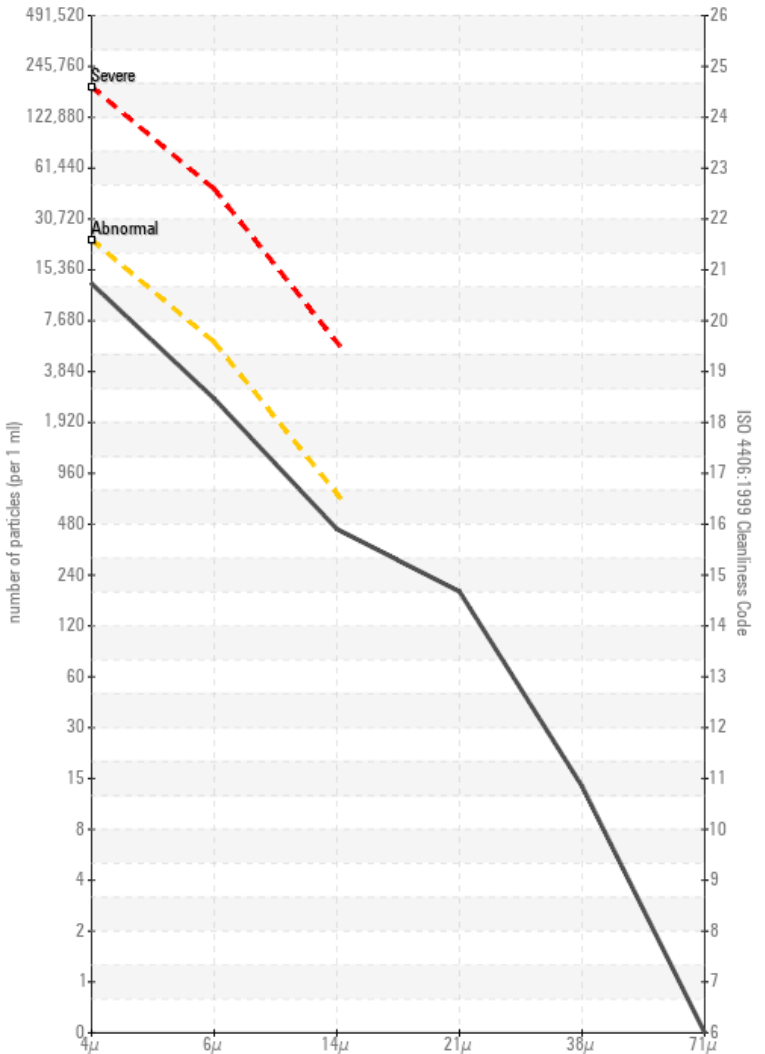
#### Non-ferrous Metals



#### Viscosity @ 40°C



#### Particle Count



#### Acid Number

