

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR R945 053481-1866 - Hydraulic System

Sample No: LH0273814

Oil Type: LIEBHERR HYDRAULIC HVI



#### SAMPLE INFORMATION

Sample Number	LH0273814	LH0220711	---	---
Sample Date	02 Feb 2024	29 Sep 2022	---	---
Machine Hours	574	425	---	---
Oil Hours	0	0	---	---
Oil Changed	Not Chngd	N/A	---	---
Sample Status	NORMAL	NORMAL	---	---

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#### OIL CONDITION

Visc @ 40°C	cSt	37.8	37.8	---	---
Acid Number (AN)	mg KOH/g	0.77	0.80	---	---



#### CONTAMINATION

Water	%	NEG	NEG	---	---
Particles >4µm		1336	14020	---	---
Particles >6µm		159	777	---	---
Particles >14µm		10	11	---	---
ISO 4406:1999 (c)		18/14/10	21/17/11	---	---
Silicon	ppm	4	5	---	---
Sodium	ppm	3	2	---	---
Potassium	ppm	0	0	---	---

#### Diagnosis

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



#### WEAR METALS

Iron	ppm	6	7	---	---
Copper	ppm	4	3	---	---
Lead	ppm	0	<1	---	---
Tin	ppm	<1	<1	---	---
Aluminum	ppm	0	<1	---	---
Chromium	ppm	0	0	---	---
Molybdenum	ppm	<1	2	---	---
Nickel	ppm	0	0	---	---
Titanium	ppm	<1	<1	---	---
Silver	ppm	0	<1	---	---
Manganese	ppm	0	<1	---	---
Vanadium	ppm	0	2	---	---



#### ADDITIVES

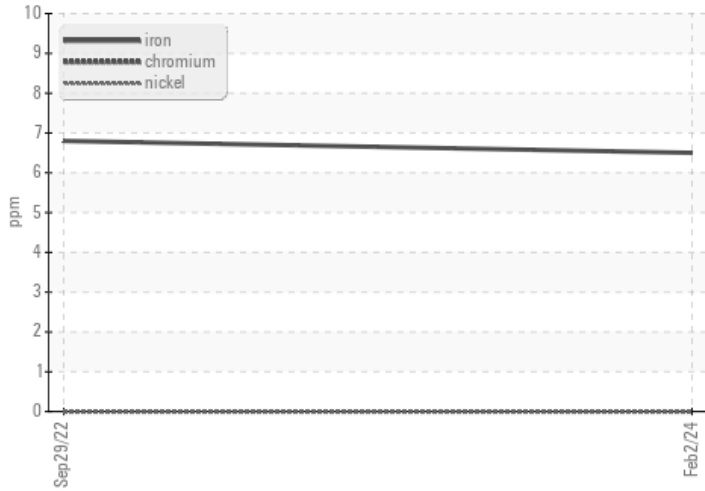
Calcium	ppm	1084	1179	---	---
Magnesium	ppm	4	1	---	---
Zinc	ppm	623	702	---	---
Phosphorus	ppm	548	622	---	---
Barium	ppm	0	0	---	---
Boron	ppm	15	13	---	---

Depot: LEC0008  
 Unique No: 10883808  
 Signed: Don Baldrige  
 Report Date: 17 Feb 2024

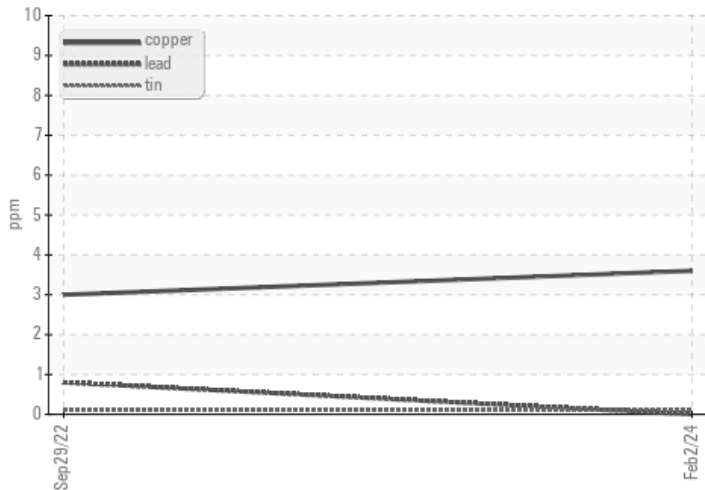


### GRAPHS

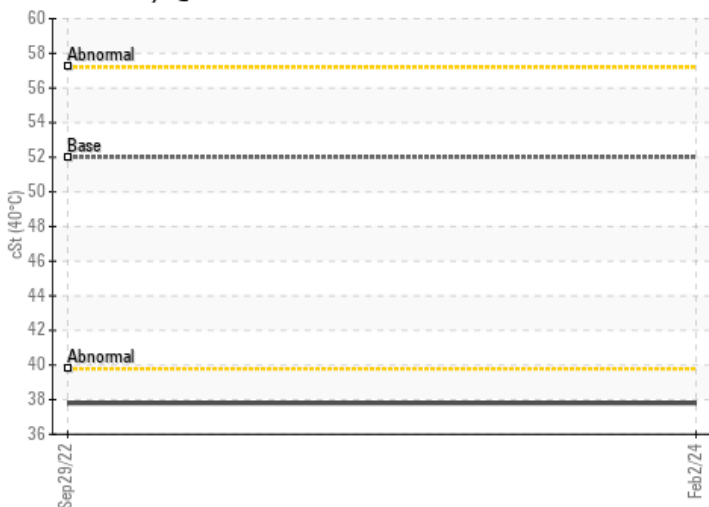
#### Ferrous Alloys



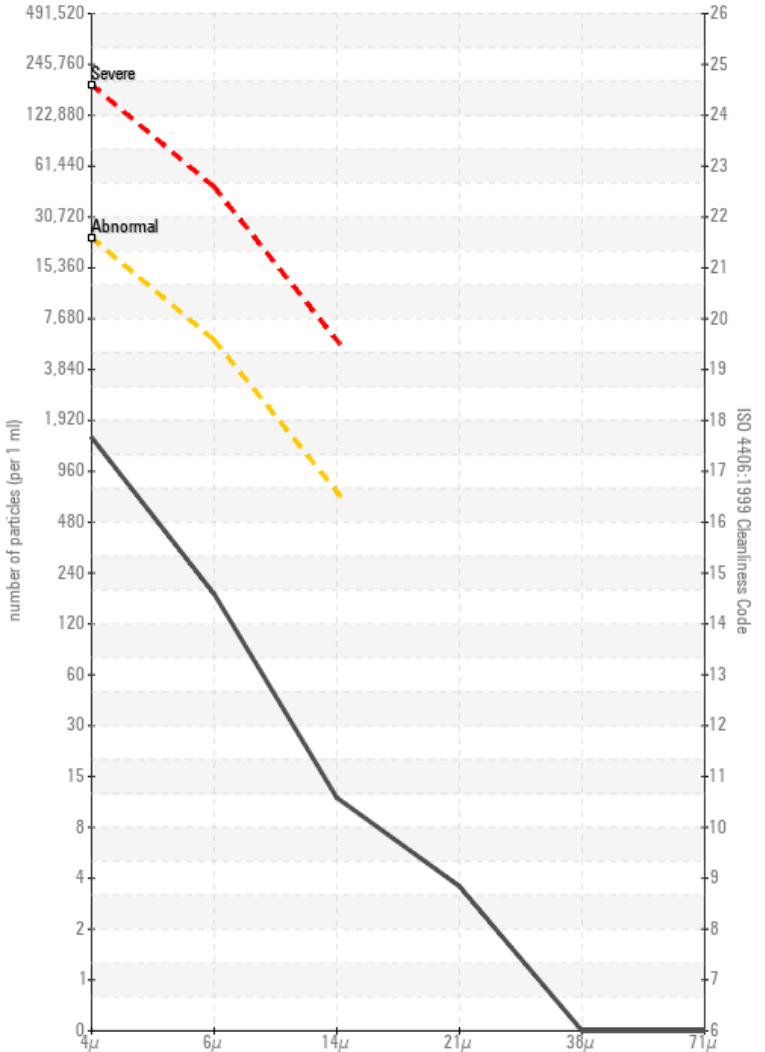
#### Non-ferrous Metals



#### Viscosity @ 40°C



#### Particle Count



#### Acid Number

