

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### MS20 - Hydraulic System

Sample No: LH0244842

Oil Type: NOT GIVEN



#### SAMPLE INFORMATION

Sample Number	LH0244842	---	---	---
Sample Date	14 Dec 2023	---	---	---
Machine Hours	3388	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Not Chngd	---	---	---
Sample Status	ABNORMAL	---	---	---

OSCAR WINSKI CO. INC

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US 47904

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#### OIL CONDITION

Visc @ 40°C	cSt	35.0	---	---	---
Acid Number (AN)	mg KOH/g	0.88	---	---	---



#### CONTAMINATION

Water	%	NEG	---	---	---
Silicon	ppm	2	---	---	---
Sodium	ppm	7	---	---	---
Potassium	ppm	0	---	---	---



#### WEAR METALS

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



#### ADDITIVES

Calcium	ppm	1047	---	---	---
Magnesium	ppm	0	---	---	---
Zinc	ppm	625	---	---	---
Phosphorus	ppm	517	---	---	---
Barium	ppm	0	---	---	---
Boron	ppm	0	---	---	---

#### Diagnosis

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample. Moderate concentration of visible metal present. All component wear rates are normal. No other contaminants were detected in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Depot: OSCLAF

Unique No: 10806092

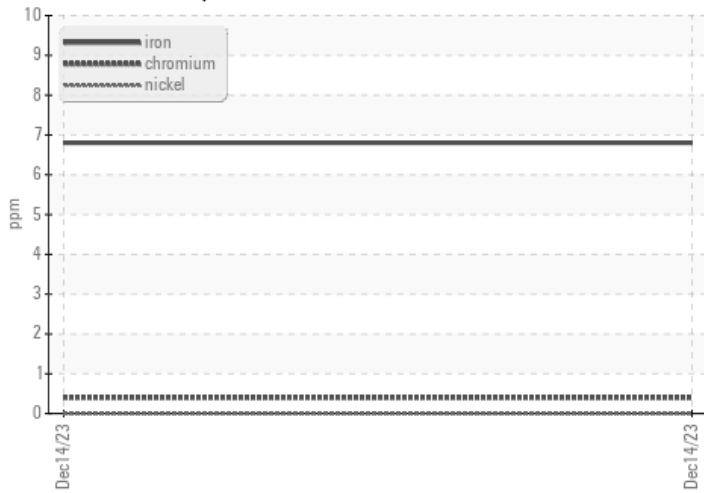
Signed: Don Baldrige

Report Date: 28 Dec 2023

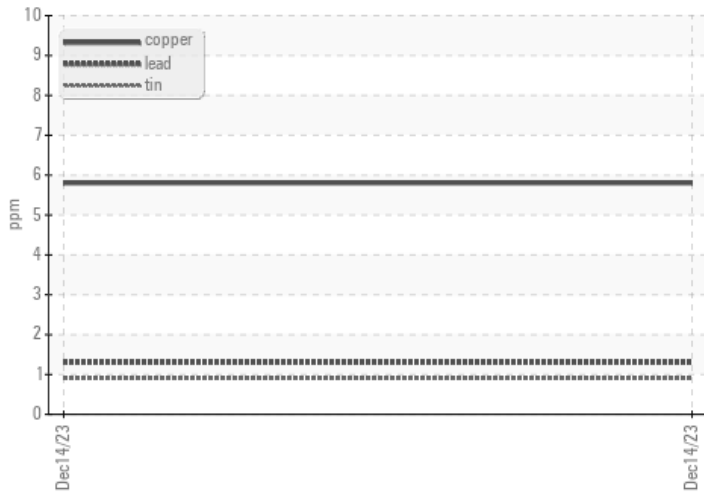


### GRAPHS

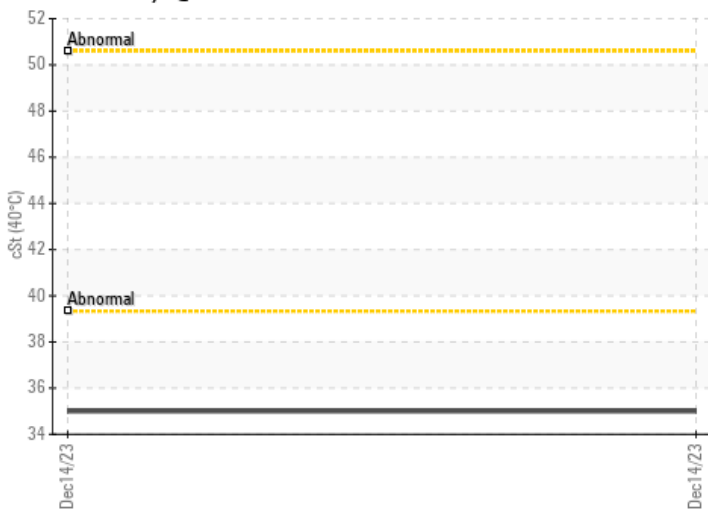
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Acid Number

