

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR 708999 (S/N 112358-1216) - Swing Drive

Sample No: LH0257854

Oil Type: SAE 80W90



#### SAMPLE INFORMATION

Sample Number	LH0257854	LH0245156	---	---
Sample Date	13 Nov 2023	20 Dec 2022	---	---
Machine Hours	0	2000	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	SEVERE	SEVERE	---	---

**AMERICAN STATE EQUIPMENT CO.**  
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 WAUSAU, WI  
 US 54401  
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 cbartnik@amstate.com  
 T: (715)675-6900  
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#### OIL CONDITION

Visc @ 40°C	cSt	● 143	145	---	---
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#### CONTAMINATION

Water	%	● 1.23	● 1.79	---	---
Silicon	ppm	● 5	● 2	---	---
Sodium	ppm	● 2	● 3	---	---
Potassium	ppm	● 2	● 0	---	---



#### WEAR METALS

Iron	ppm	● 1455	● 515	---	---
Copper	ppm	● 126	● 55	---	---
Lead	ppm	● 2	● <1	---	---
Tin	ppm	● 2	● 2	---	---
Aluminum	ppm	● <1	● 1	---	---
Chromium	ppm	● 13	● 5	---	---
Molybdenum	ppm	● 2	<1	---	---
Nickel	ppm	● 1	● 3	---	---
Titanium	ppm	<1	0	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	● 12	4	---	---
Vanadium	ppm	<1	<1	---	---



#### ADDITIVES

Calcium	ppm	● 23	56	---	---
Magnesium	ppm	● 5	3	---	---
Zinc	ppm	● 37	34	---	---
Phosphorus	ppm	● 1748	963	---	---
Barium	ppm	● <1	0	---	---
Boron	ppm	● 298	5	---	---

#### Diagnosis

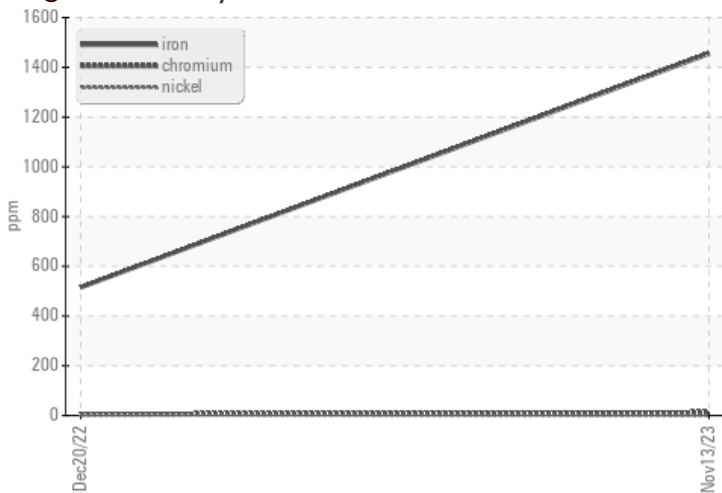
We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Gear wear is indicated. There is a high concentration of water present in the oil. The oil is no longer serviceable due to the presence of contaminants.

Depot: LEC0008  
 Unique No: 10752666  
 Signed: Sean Felton  
 Report Date: 22 Nov 2023

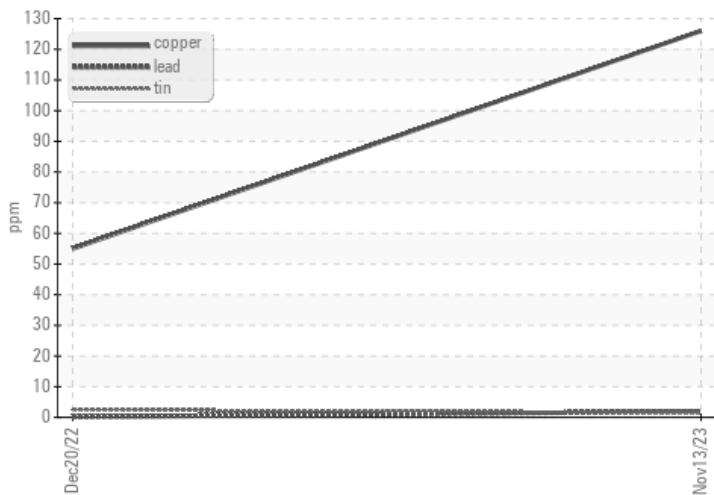


### GRAPHS

#### ● Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C

