

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR L580 080458-1760 - Hydraulic System

Sample No: LHMC131962

Oil Type: AW HYDRAULIC OIL ISO 46



**AMERICAN STATE EQUIPMENT CO.**  
 2055 SOUTH 108TH STREET  
 MILWAUKEE, WI  
 US 53227  
 Contact: RAY SCHMIDT  
 RSCHMIDT@AMSTATE.COM  
 T: (414)234-0854  
 F: (414)541-1892



#### Sample Information

Sample Number	LHMC131962	---	---	---
Sample Date	23 May 2024	---	---	---
Machine Hours	88	---	---	---
Oil Hours	88	---	---	---
Oil Changed	Not Chngd	---	---	---
Sample Status	ABNORMAL	---	---	---



#### Oil Condition

Visc @ 40°C	cSt	● 45.3	---	---	---
Acid Number (AN)	mg KOH/g	● 1.21	---	---	---



#### Contamination

Water	%	NEG	---	---	---
Particles >4µm		● 69870	---	---	---
Particles >6µm		● 10041	---	---	---
Particles >14µm		● 87	---	---	---
ISO 4406:1999 (c)		23/21/14	---	---	---
Silicon	ppm	● 2	---	---	---
Sodium	ppm	● 0	---	---	---
Potassium	ppm	● 2	---	---	---



#### Wear Metals

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



#### Additives

Calcium	ppm	● 793	---	---	---
Magnesium	ppm	● 10	---	---	---
Zinc	ppm	● 610	---	---	---
Phosphorus	ppm	● 511	---	---	---
Barium	ppm	● <1	---	---	---
Boron	ppm	● 0	---	---	---

#### Diagnosis

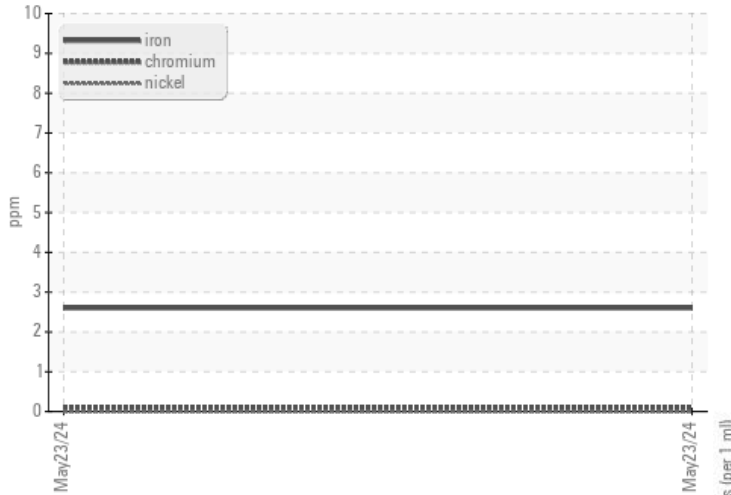
No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

**Depot:** LEC0007  
**Unique No:** 11057478  
**Signed:** Don Baldrige  
**Report Date:** 01 Jun 2024

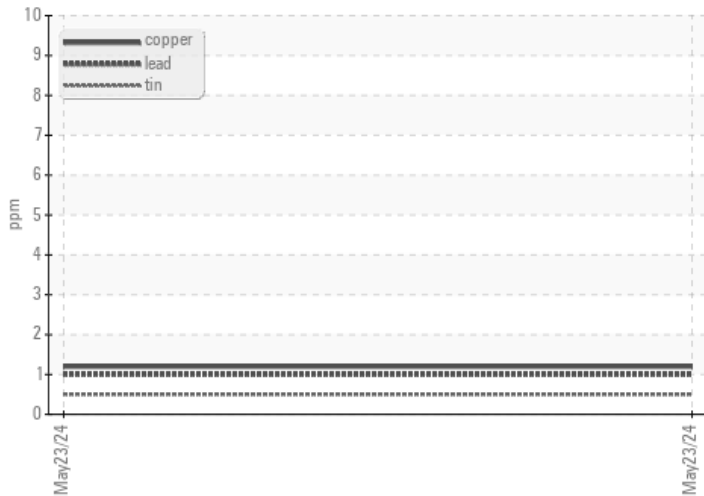


### Graphs

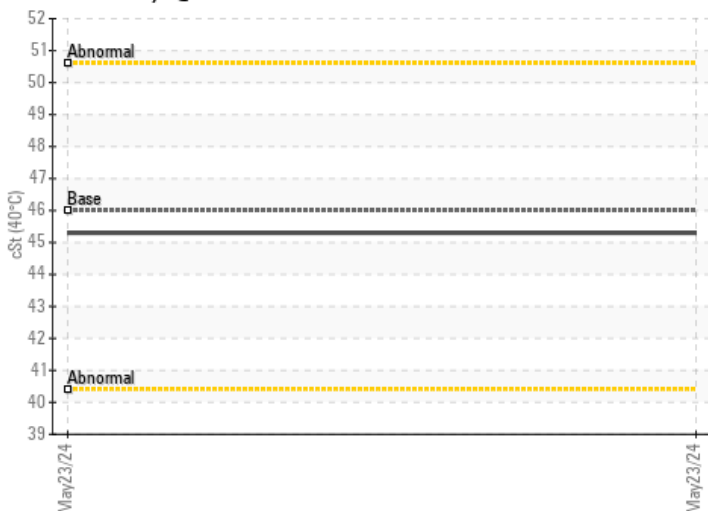
#### Ferrous Alloys



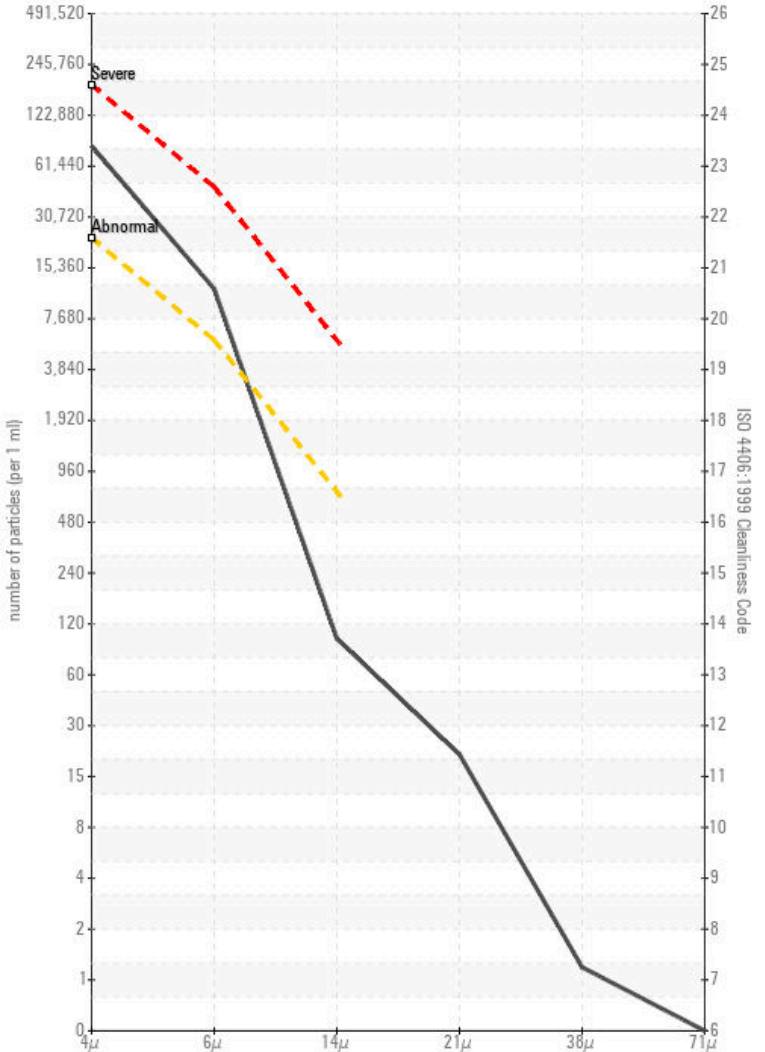
#### Non-ferrous Metals



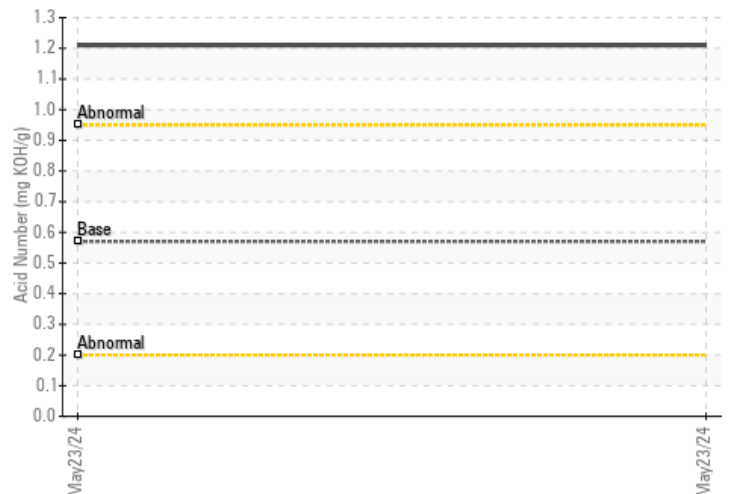
#### Viscosity @ 40°C



#### Particle Count



#### Acid Number



# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR L580 080458-1760 - Splitter Box

Sample No: LHMC165935

Oil Type: GEAR OIL SAE 80W90



**AMERICAN STATE EQUIPMENT CO.**  
 2055 SOUTH 108TH STREET  
 MILWAUKEE, WI  
 US 53227  
 Contact: RAY SCHMIDT  
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 T: (414)234-0854  
 F: (414)541-1892



#### Sample Information

Sample Number	LHMC165935	---	---	---
Sample Date	23 May 2024	---	---	---
Machine Hours	88	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	NORMAL	---	---	---



#### Oil Condition

Visc @ 40°C	cSt	● 164	---	---	---
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#### Contamination

Water	%	NEG	---	---	---
Silicon	ppm	● 4	---	---	---
Sodium	ppm	● 8	---	---	---
Potassium	ppm	● 305	---	---	---



#### Wear Metals

Iron	ppm	● 44	---	---	---
Copper	ppm	● <1	---	---	---
Lead	ppm	● 0	---	---	---
Tin	ppm	● <1	---	---	---
Aluminum	ppm	● 2	---	---	---
Chromium	ppm	● <1	---	---	---
Molybdenum	ppm	● 16	---	---	---
Nickel	ppm	● 7	---	---	---
Titanium	ppm	● 0	---	---	---
Silver	ppm	● 0	---	---	---
Manganese	ppm	● 2	---	---	---
Vanadium	ppm	● <1	---	---	---



#### Additives

Calcium	ppm	● 91	---	---	---
Magnesium	ppm	● 10	---	---	---
Zinc	ppm	● 48	---	---	---
Phosphorus	ppm	● 1942	---	---	---
Barium	ppm	● 10	---	---	---
Boron	ppm	● 234	---	---	---

#### Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

**Depot:** LEC0007  
**Unique No:** 11057934  
**Signed:** Don Baldrige  
**Report Date:** 02 Jun 2024



### Graphs

