

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH50 1203-81839 - Swing Drive

Sample No: LH0243706

Oil Type: GEAR OIL SAE 85W90



**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	LH0243706	LH0185304	LH0166795	LHMC146530
Sample Date	27 Sep 2023	04 Aug 2021	28 Sep 2020	15 May 2019
Machine Hours	0	7953	6978	4996
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ABNORMAL	ABNORMAL	ABNORMAL	NORMAL



#### OIL CONDITION

Visc @ 40°C	cSt	221	200	235	205
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#### CONTAMINATION

Water	%	---	0.623	1.23	---
Silicon	ppm	4	3	3	1
Sodium	ppm	<1	3	2	2
Potassium	ppm	0	0	0	7



#### WEAR METALS

Iron	ppm	1646	1346	1839	224
Copper	ppm	404	503	319	103
Lead	ppm	3	<1	0	1
Tin	ppm	16	7	8	0
Aluminum	ppm	<1	0	0	<1
Chromium	ppm	18	14	18	2
Molybdenum	ppm	2	1	1	<1
Nickel	ppm	2	2	2	0
Titanium	ppm	<1	<1	<1	0
Silver	ppm	0	<1	0	0
Manganese	ppm	14	9	13	2
Vanadium	ppm	<1	<1	<1	0



#### ADDITIVES

Calcium	ppm	22	13	38	18
Magnesium	ppm	5	0	<1	<1
Zinc	ppm	21	11	25	27
Phosphorus	ppm	1765	2420	2188	2078
Barium	ppm	0	0	0	0
Boron	ppm	6	10	18	<1

#### Diagnosis

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. Gear wear is indicated. 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: 10673825  
 Signed: Sean Felton  
 Report Date: 04 Oct 2023

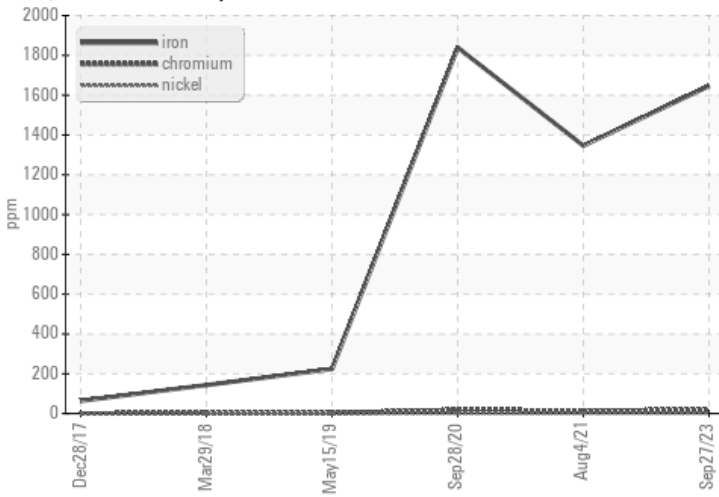
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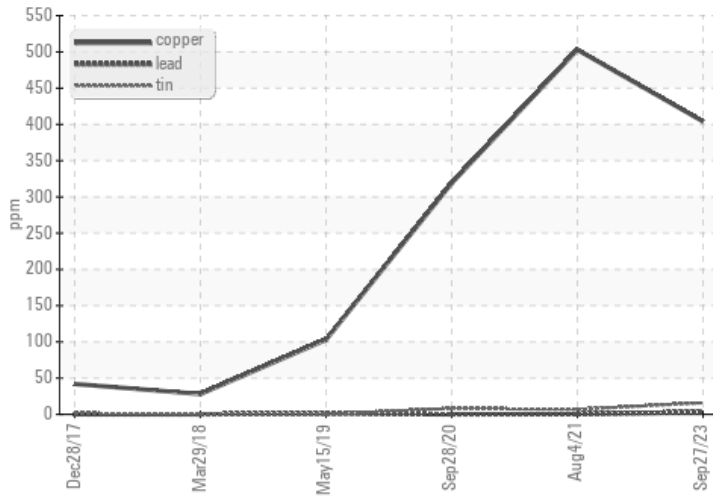


### GRAPHS

#### ● Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C

