

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH50M 1216-108671- Swing Drive

Sample No: LH0263997

Oil Type: GEAR OIL LS 80W90



**AMERICAN STATE EQUIPMENT CO.**  
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#### SAMPLE INFORMATION

Sample Number	LH0263997	LH0243418	LH0254781	LH0203911
Sample Date	14 Dec 2023	05 Sep 2023	12 Apr 2023	17 Jun 2022
Machine Hours	19125	17864	16979	14203
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Not Changd	Changed
Sample Status	<b>NORMAL</b>	NORMAL	ABNORMAL	NORMAL



#### OIL CONDITION

Visc @ 40°C	cSt	130	125	136	174.4
		●	●	●	●



#### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	● 2	● 2	● 5	● 3
Sodium	ppm	● <1	● <1	● <1	● <1
Potassium	ppm	● 0	● <1	● 0	● 2



#### WEAR METALS

Iron	ppm	● 368	● 437	● 1396	● 708
Copper	ppm	● 13	● 14	● 22	● 14
Lead	ppm	● 0	● 0	● 0	● <1
Tin	ppm	● <1	● 0	● 0	● <1
Aluminum	ppm	● 0	● 0	● 3	● 2
Chromium	ppm	● 4	● 4	● 18	● 8
Molybdenum	ppm	● 0	● 0	● 2	● 2
Nickel	ppm	● <1	● <1	● 2	● 2
Titanium	ppm	● <1	● 0	● <1	● 0
Silver	ppm	● 0	● <1	● 0	● <1
Manganese	ppm	● 3	● 4	● 11	● 5
Vanadium	ppm	● 0	● 0	● <1	● 0



#### ADDITIVES

Calcium	ppm	● 23	● 44	● 49	● 139
Magnesium	ppm	● 3	● 12	● 8	● 13
Zinc	ppm	● 16	● 24	● 35	● 92
Phosphorus	ppm	● 965	● 730	● 694	● 800
Barium	ppm	● 0	● 0	● 0	● 0
Boron	ppm	● 1	● 2	● 13	● 25

#### Diagnosis

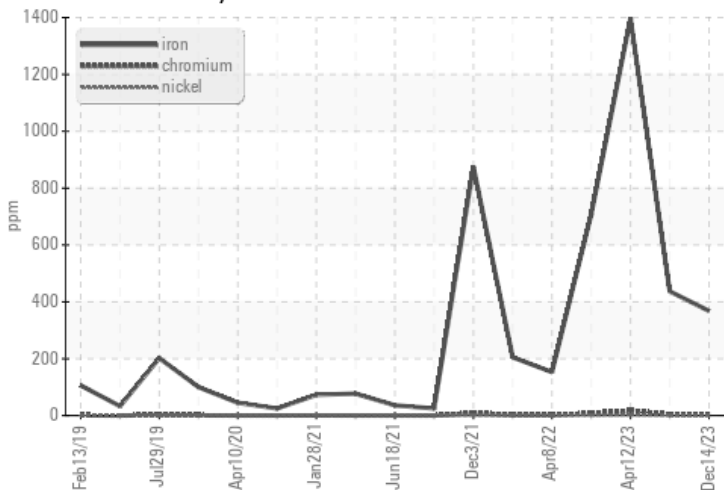
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the fluid. The condition of the fluid is acceptable for the time in service.

Depot: LEC0008  
 Unique No: 10806321  
 Signed: Don Baldrige  
 Report Date: 28 Dec 2023

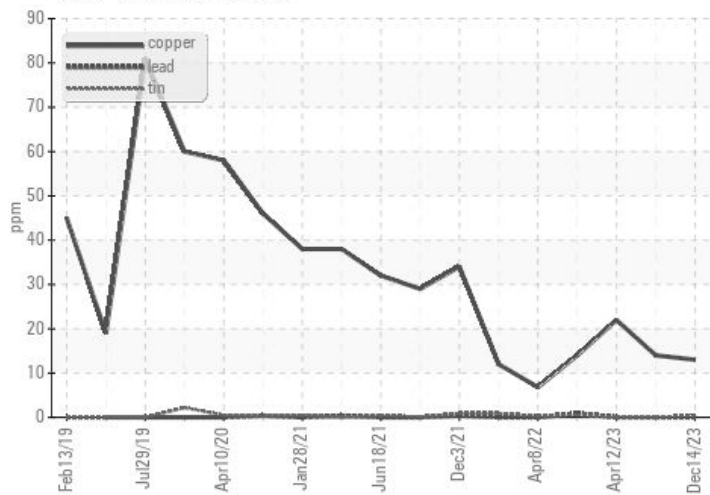


### GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

