

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH50 1203-81839 - Front Differential

Sample No: LH0243711

Oil Type: GEAR OIL SAE 85W90



**AMERICAN STATE EQUIPMENT CO.**  
 2055 SOUTH 108TH STREET  
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 US 53227  
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#### SAMPLE INFORMATION

Sample Number	LH0243711	LH0185305	LH0166797	LHMC148364
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	NORMAL	NORMAL	NORMAL	NORMAL



#### OIL CONDITION

Visc @ 40°C	cSt	170	195	194	193
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#### CONTAMINATION

Silicon	ppm	<1	2	<1	<1
Sodium	ppm	<1	3	4	3
Potassium	ppm	0	0	<1	0



#### WEAR METALS

Iron	ppm	4	5	4	5
Copper	ppm	6	4	10	10
Lead	ppm	0	<1	<1	2
Tin	ppm	0	0	0	0
Aluminum	ppm	0	0	0	<1
Chromium	ppm	0	0	0	0
Molybdenum	ppm	1	0	0	<1
Nickel	ppm	0	<1	0	0
Titanium	ppm	<1	0	0	0
Silver	ppm	0	0	4	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	0	0



#### ADDITIVES

Calcium	ppm	29	5	22	38
Magnesium	ppm	8	<1	<1	<1
Zinc	ppm	14	0	7	20
Phosphorus	ppm	2117	2199	2343	2187
Barium	ppm	0	0	<1	<1
Boron	ppm	6	11	7	3

#### Diagnosis

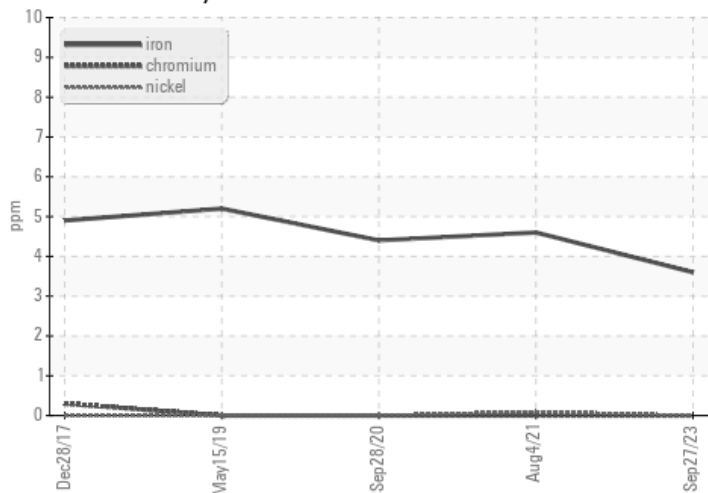
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: LEC0007  
 Unique No: 10673824  
 Signed: Sean Felton  
 Report Date: 04 Oct 2023

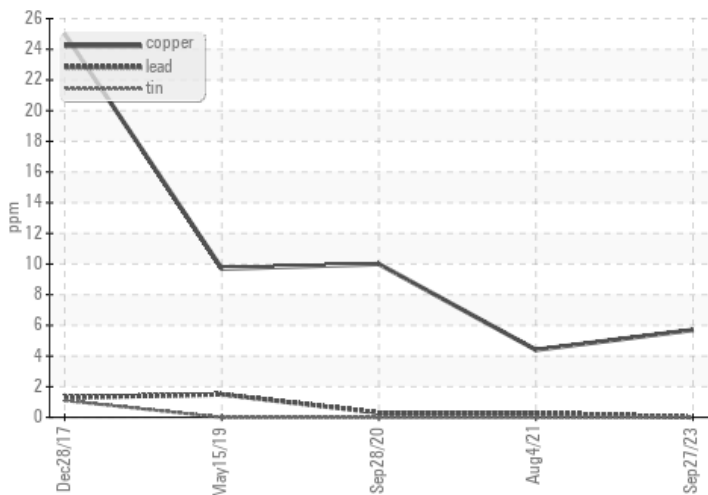


### GRAPHS

#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C

