

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH50 1203-77107 - Front Left Wheel Hub

Sample No: LH0272535

Oil Type: CHEVRON DELO GEAR ESI OIL 80W90



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

Sample Number	LH0272535	LH0254739	LH0254743	LH0243163
Sample Date	28 Nov 2023	16 Jun 2023	16 Jun 2023	22 Dec 2022
Machine Hours	20037	18994	18994	17940
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	ABNORMAL	NORMAL



#### OIL CONDITION

Visc @ 40°C	cSt	121	132	133	138
		●	●	●	●



#### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	● 12	● 41	● 20	● 37
Sodium	ppm	● 4	● 1	● 10	● 0
Potassium	ppm	● 2	● 3	● 4	● 4



#### WEAR METALS

Iron	ppm	● 120	● 66	● 334	● 89
Copper	ppm	● 10	● <1	● 31	● 1
Lead	ppm	● 0	● 0	● 0	● 0
Tin	ppm	● 0	● 0	● 0	● 0
Aluminum	ppm	● <1	● 4	● 3	● 3
Chromium	ppm	● <1	● <1	● 2	● <1
Molybdenum	ppm	● 0	● <1	● <1	● 1
Nickel	ppm	● 0	● <1	● <1	● 0
Titanium	ppm	1	<1	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	● 3	● <1	● 4	● <1
Vanadium	ppm	0	0	0	0



#### ADDITIVES

Calcium	ppm	● 65	● 98	● 46	● 117
Magnesium	ppm	● 9	● 11	● 8	● 14
Zinc	ppm	● 18	● 39	● 44	● 55
Phosphorus	ppm	● 949	● 880	● 732	● 850
Barium	ppm	● 0	● 0	● 0	● 0
Boron	ppm	● 1	● 25	● <1	● 35

#### Diagnosis

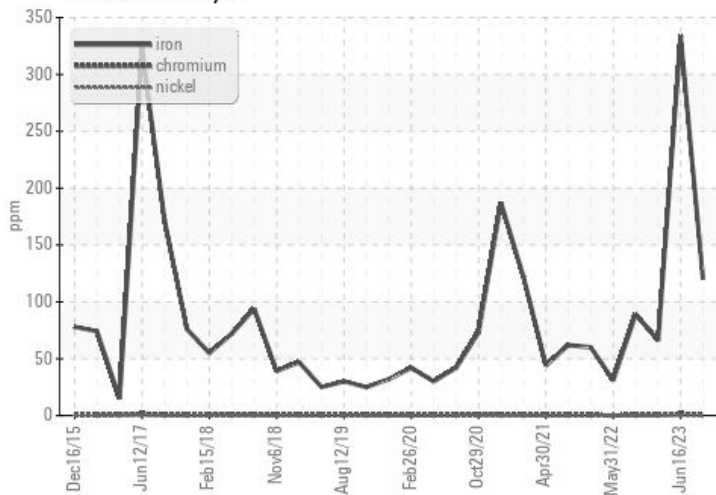
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: LEC0008  
 Unique No: 10781654  
 Signed: Sean Felton  
 Report Date: 14 Dec 2023

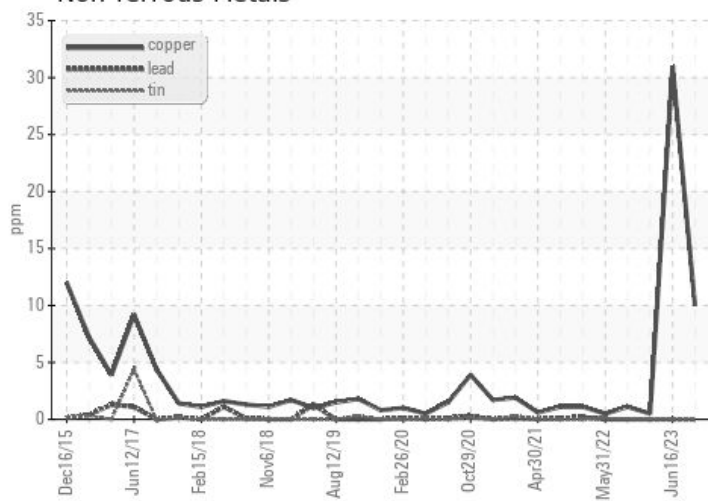


### GRAPHS

#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C

