

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR A934C 064064-1007 - Front Left Wheel Hub

Sample No: LH0268382

Oil Type: GEAR OIL LS 80W90



**AMERICAN STATE EQUIPMENT CO.**  
 2400 NORTH 14TH AVENUE  
 WAUSAU, WI  
 US 54401  
 Contact: CHRIS BARTNIK  
 cbartnik@amstate.com  
 T: (715)675-6900  
 F: (715)675-9748



#### Sample Information

Sample Number	LH0268382	LH0254764	LH0243221	LH0217640
Sample Date	27 Jun 2024	23 Jun 2023	10 Jan 2023	05 Jul 2022
Machine Hours	26934	24973	24002	23011
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ATTENTION	NORMAL	NORMAL	NORMAL



#### Oil Condition

Visc @ 40°C	cSt	69.7	176	177	159
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#### Contamination

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	6	11	6	5
Sodium	ppm	1	1	4	3
Potassium	ppm	<1	2	0	3



#### Wear Metals

Iron	ppm	41	53	60	43
Copper	ppm	2	3	1	1
Lead	ppm	<1	<1	0	0
Tin	ppm	0	0	0	<1
Aluminum	ppm	<1	2	<1	1
Chromium	ppm	0	<1	<1	<1
Molybdenum	ppm	0	<1	<1	<1
Nickel	ppm	<1	0	0	0
Titanium	ppm	<1	<1	0	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



#### Additives

Calcium	ppm	2076	26	48	99
Magnesium	ppm	7	5	4	11
Zinc	ppm	896	25	15	29
Phosphorus	ppm	1164	1941	1711	1587
Barium	ppm	0	2	0	0
Boron	ppm	0	5	6	21

#### Diagnosis

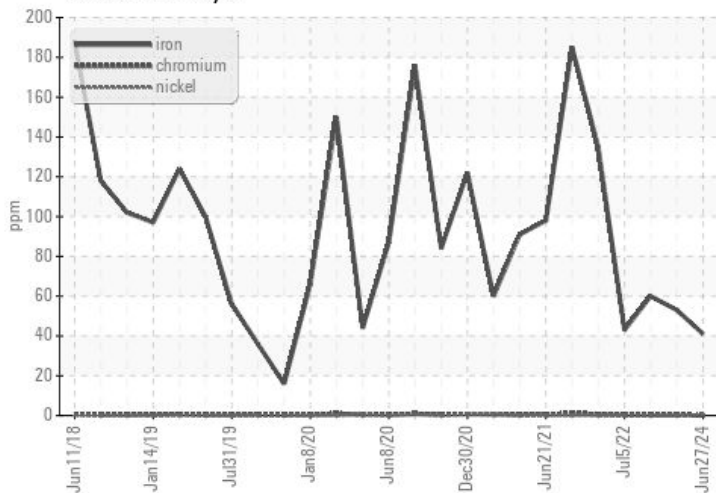
The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.

Depot: LEC0008  
 Unique No: 11126014  
 Signed: Don Baldrige  
 Report Date: 17 Jul 2024

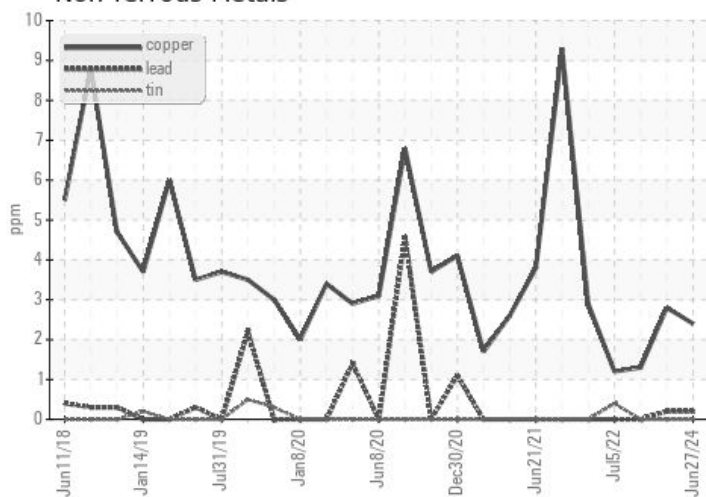


### Graphs

#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C

