

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH50M 1216-108671 - Rear Differential

Sample No: LH0268400

Oil Type: GEAR OIL LS 80W90



**AMERICAN STATE EQUIPMENT CO.**  
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#### Sample Information

Sample Number	<b>LH0268400</b>	LH0258752	LH0263994	LH0243415
Sample Date	<b>14 Jun 2024</b>	23 Feb 2024	14 Dec 2023	05 Sep 2023
Machine Hours	<b>21235</b>	20036	19125	17864
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL



#### Oil Condition

Visc @ 40°C	cSt	<b>120</b>	119	122	126
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#### Contamination

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	<b>&lt;1</b>	<1	<1	1
Sodium	ppm	<b>1</b>	2	1	1
Potassium	ppm	<b>1</b>	<1	0	1



#### Wear Metals

Iron	ppm	<b>4</b>	3	4	8
Copper	ppm	<b>2</b>	1	<1	3
Lead	ppm	<b>0</b>	0	0	0
Tin	ppm	<b>0</b>	<1	0	0
Aluminum	ppm	<b>&lt;1</b>	<1	0	2
Chromium	ppm	<b>0</b>	0	0	0
Molybdenum	ppm	<b>0</b>	0	0	0
Nickel	ppm	<b>0</b>	<1	0	0
Titanium	ppm	<b>0</b>	0	<1	1
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	0	0	<1



#### Additives

Calcium	ppm	<b>22</b>	38	43	56
Magnesium	ppm	<b>3</b>	6	6	15
Zinc	ppm	<b>19</b>	18	20	32
Phosphorus	ppm	<b>997</b>	855	862	693
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>15</b>	0	1	4

#### Diagnosis

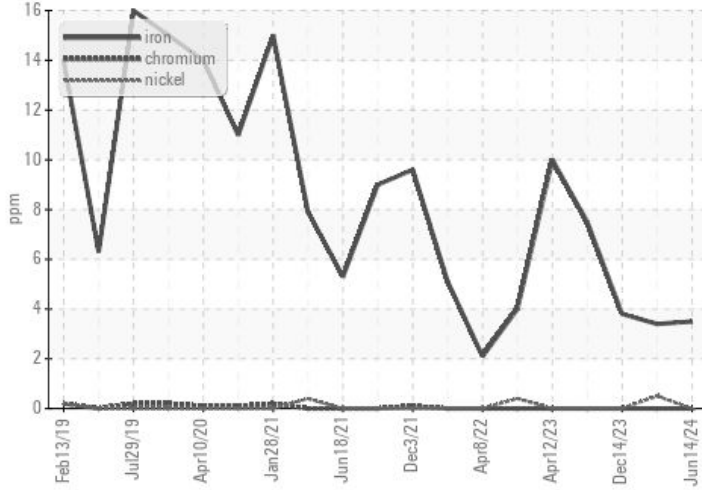
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

**Depot:** LEC0008  
**Unique No:** 11097179  
**Signed:** Don Baldrige  
**Report Date:** 26 Jun 2024

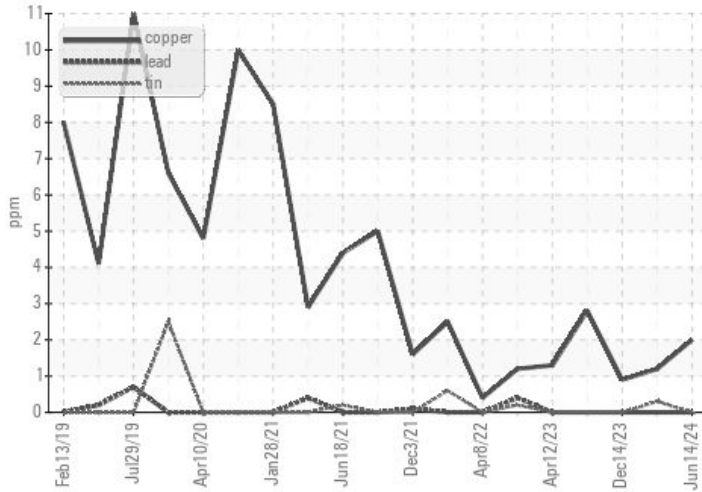


### Graphs

#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C

