



# LIEBHERR

## OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Area  
**(361220)**  
Machine Id  
**LIEBHERR LH50M 134706-1216**  
Component  
**Rear Right Wheel Hub**  
Fluid  
**GEAR OIL SAE 80W90 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH</b>	LH	LH0250104
Sample Date		Client Info		<b>15 Feb 2024</b>	17 Sep 2023	27 Mar 2023
Machine Age	hrs	Client Info		<b>5100</b>	4000	2020
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	N/A	N/A
Filter Changed		Client Info		<b>None</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>325	<b>18</b>	18	24
Chromium	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>4	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m)	>75	<b>1</b>	2	2
Tin	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

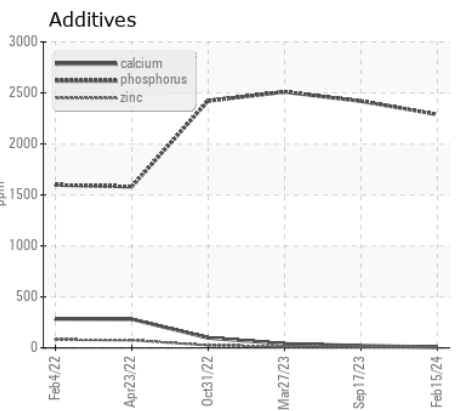
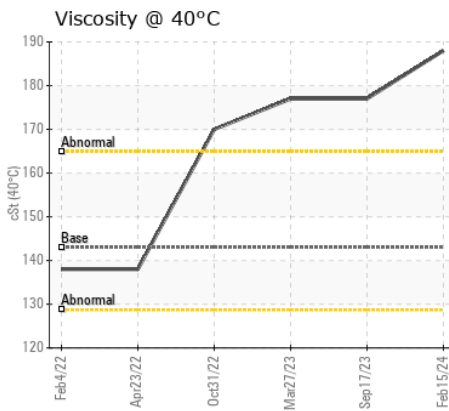
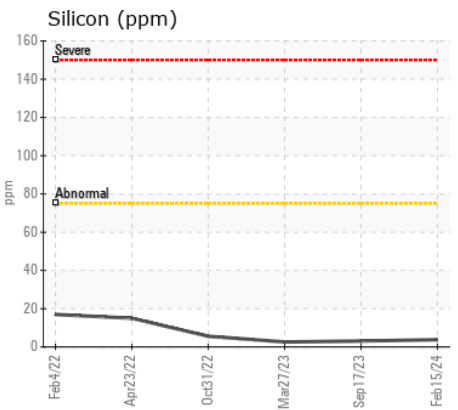
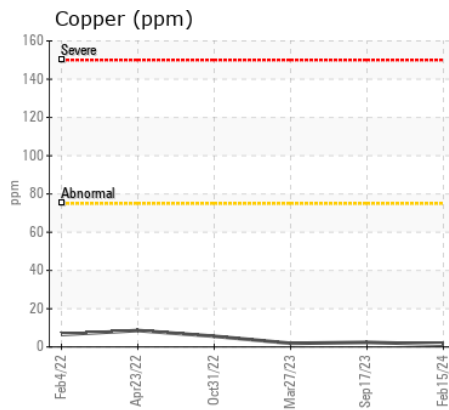
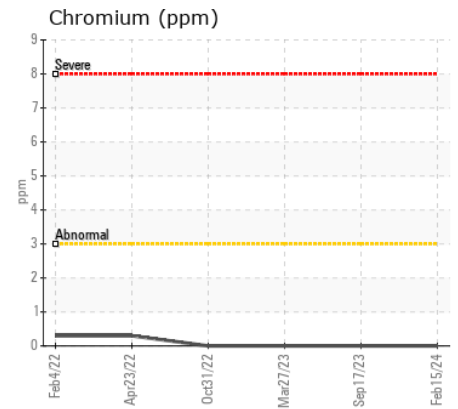
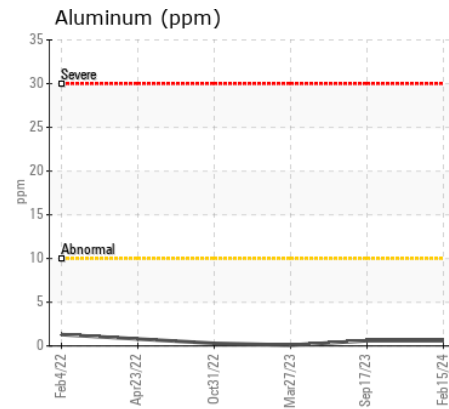
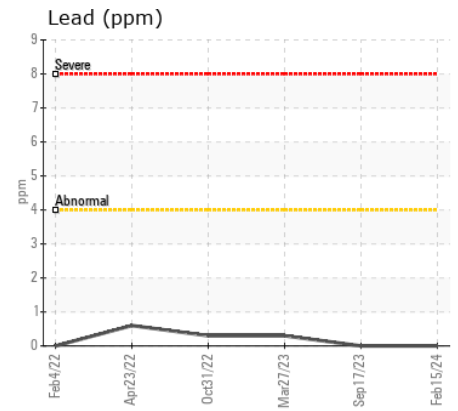
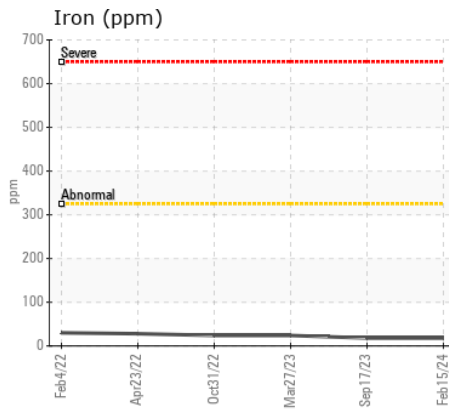
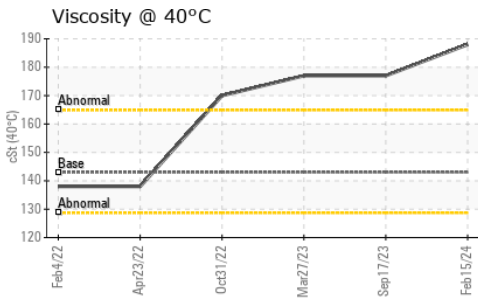
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>75	<b>4</b>	3	3
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>VLITE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>170	<b>2</b>	4	6
Boron	ppm	ASTM D5185(m)	400	<b>&lt;1</b>	3	2
Barium	ppm	ASTM D5185(m)	200	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	12	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	12	<b>2</b>	<1	<1
Calcium	ppm	ASTM D5185(m)	150	<b>9</b>	22	40
Phosphorus	ppm	ASTM D5185(m)	1650	<b>2289</b>	2419	2510
Zinc	ppm	ASTM D5185(m)	125	<b>7</b>	12	14
Sulfur	ppm	ASTM D5185(m)	22500	<b>24871</b>	27112	32987
Visc @ 40°C	cSt	ASTM D7279(m)	143	<b>188</b>	177	177



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH  
**Lab Number** : 02616762  
**Unique Number** : 5733872  
**Test Package** : MOB 1  
**Received** : 20 Feb 2024  
**Tested** : 20 Feb 2024  
**Diagnosed** : 20 Feb 2024 - Wes Davis

**Industrial Metals**  
 550 Messier St.  
 Winnipeg, MB  
 CA R2J 0G5  
 Contact: Service Manager

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.

T:  
F: