



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR LH22M 142190-1250**  
Component  
**Front Differential**  
Fluid  
**GEAR OIL SAE 75W90 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0291306</b>	LH0285129	LH0257002
Sample Date		Client Info		<b>02 May 2024</b>	29 Jan 2024	19 Mar 2023
Machine Age	hrs	Client Info		<b>2979</b>	2241	754
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>	Changed	Not Changd
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>190	<b>2</b>	4	11
Chromium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	1
Lead	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>70	<b>&lt;1</b>	<1	1
Tin	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

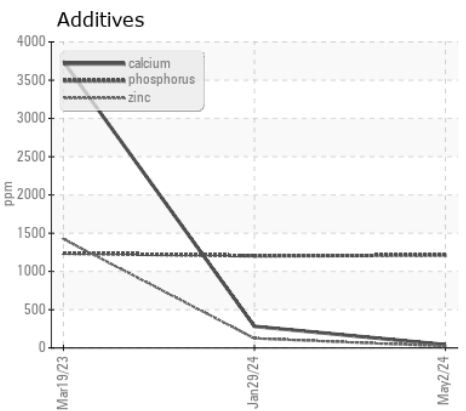
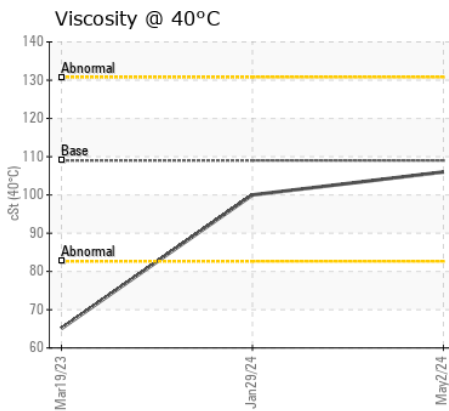
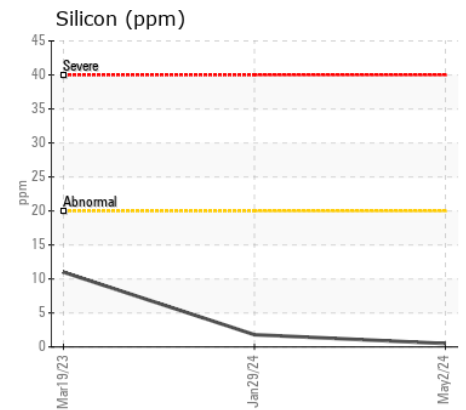
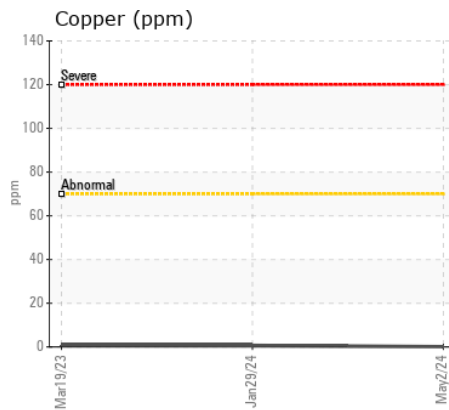
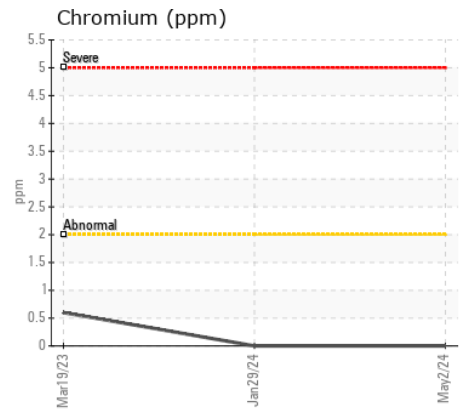
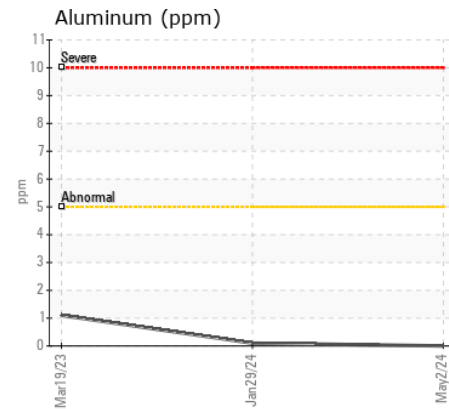
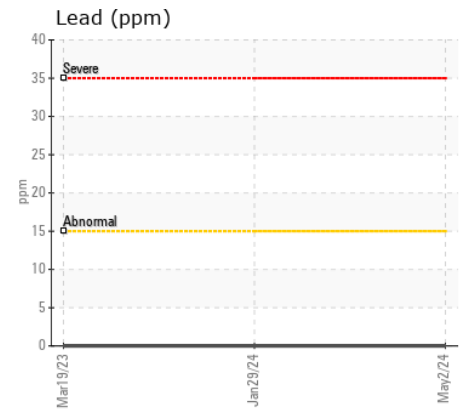
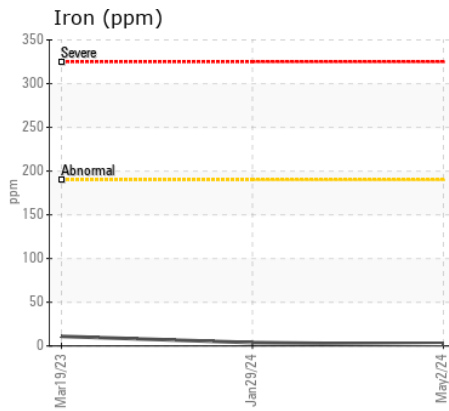
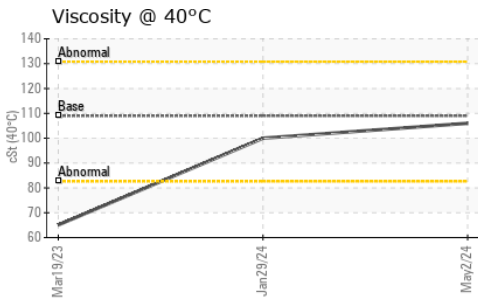
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	2	11
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	<1
Water		WC Method	>.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>NONE</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*	>.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)		<b>&lt;1</b>	2	17
Boron	ppm	ASTM D5185(m)	400	<b>306</b>	283	100
Barium	ppm	ASTM D5185(m)	200	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	12	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	4
Magnesium	ppm	ASTM D5185(m)	12	<b>2</b>	2	12
Calcium	ppm	ASTM D5185(m)	150	<b>43</b>	282	3744
Phosphorus	ppm	ASTM D5185(m)	1650	<b>1211</b>	1204	1238
Zinc	ppm	ASTM D5185(m)	125	<b>22</b>	125	1423
Sulfur	ppm	ASTM D5185(m)	22500	<b>20543</b>	19465	2924
Visc @ 40°C	cSt	ASTM D7279(m)	109	<b>106</b>	100	65.1



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0291306 **Received** : 03 May 2024  
**Lab Number** : 02633296 **Tested** : 03 May 2024  
**Unique Number** : 5774449 **Diagnosed** : 03 May 2024 - Wes Davis  
**Test Package** : MOB 1

**Combined Metals Industries**  
 8470 Keele Street  
 Concord, ON  
 CA L4K 2S1  
 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.

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