



# LIEBHERR

## OIL ANALYSIS REPORT

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



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

### RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL SAE 75W90. Please confirm.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0291307</b>	LH0285128	LH0257001
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>3</b>	5	12
Chromium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
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>	<1	0
Copper	ppm	ASTM D5185(m)	>70	<b>1</b>	3	4
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

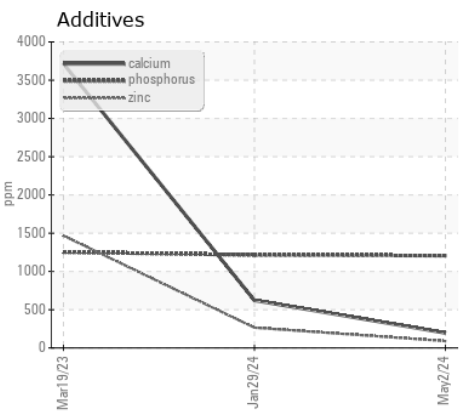
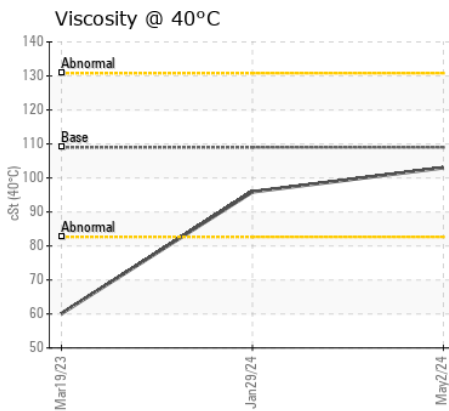
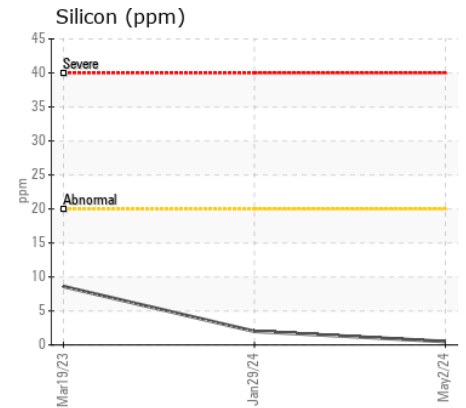
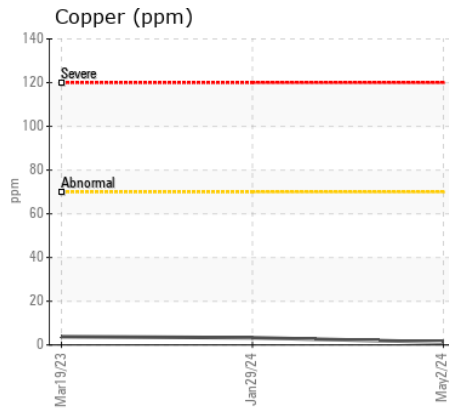
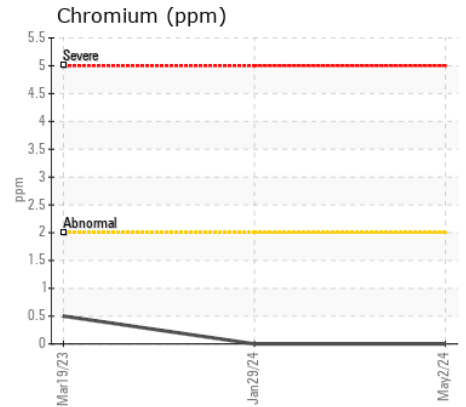
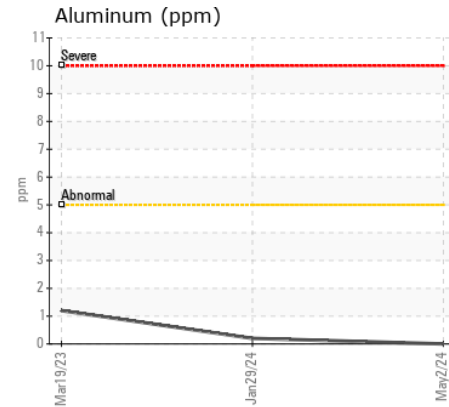
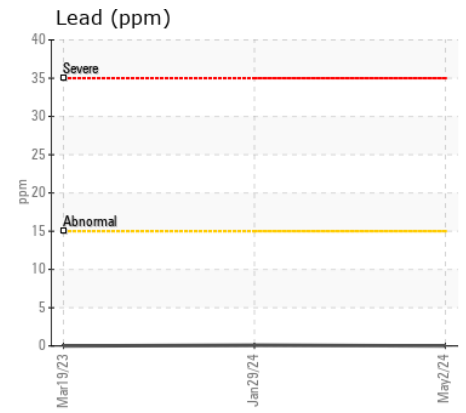
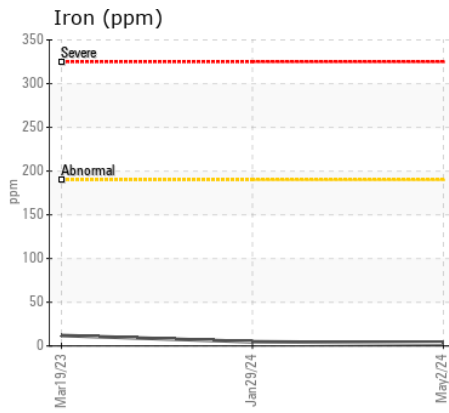
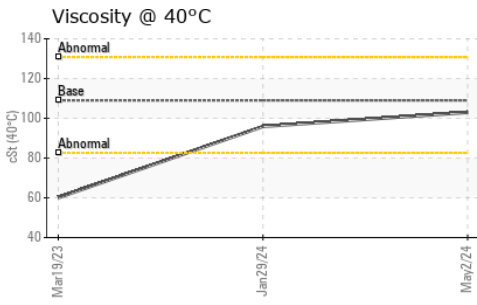
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	2	9
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	2
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>2</b>	4	15
Boron	ppm	ASTM D5185(m)	400	<b>292</b>	264	103
Barium	ppm	ASTM D5185(m)	200	<b>&lt;1</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	12	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	3
Magnesium	ppm	ASTM D5185(m)	12	<b>2</b>	3	11
Calcium	ppm	ASTM D5185(m)	150	<b>196</b>	622	3715
Phosphorus	ppm	ASTM D5185(m)	1650	<b>1206</b>	1215	1253
Zinc	ppm	ASTM D5185(m)	125	<b>90</b>	265	1468
Sulfur	ppm	ASTM D5185(m)	22500	<b>19454</b>	18415	3126
Visc @ 40°C	cSt	ASTM D7279(m)	109	<b>103</b>	95.9	60.1



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0291307  
**Lab Number** : 02633295  
**Unique Number** : 5774448  
**Test Package** : MOB 1  
**Received** : 03 May 2024  
**Tested** : 03 May 2024  
**Diagnosed** : 03 May 2024 - Wes Davis

**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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F: