



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR LH22M 146587-1250**  
Component  
**Rear Left Wheel Hub**  
Fluid  
**LIEBHERR GEAR BASIC 90 LS (--- GAL)**

### RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.  
Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0282649</b>	LH0279530	LH
Sample Date		Client Info		<b>05 Dec 2023</b>	05 Dec 2023	28 Aug 2023
Machine Age	hrs	Client Info		<b>2000</b>	1259	574
Oil Age	hrs	Client Info		<b>1000</b>	0	0
Filter Age	hrs	Client Info		<b>1000</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)	>450	<b>17</b>	15	19
Chromium	ppm	ASTM D5185(m)	>4	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	1
Lead	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	0
Copper	ppm	ASTM D5185(m)	>75	<b>&lt;1</b>	2	4
Tin	ppm	ASTM D5185(m)		<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>VLITE</b>	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

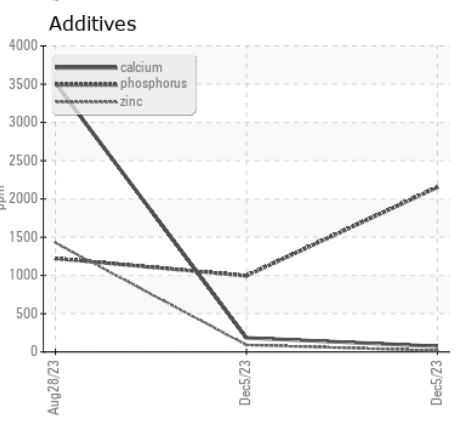
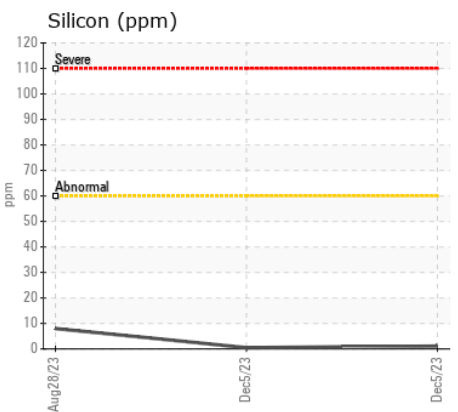
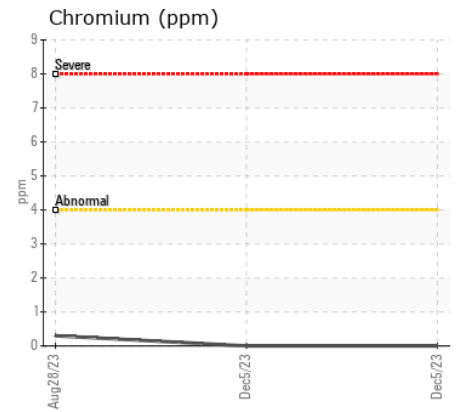
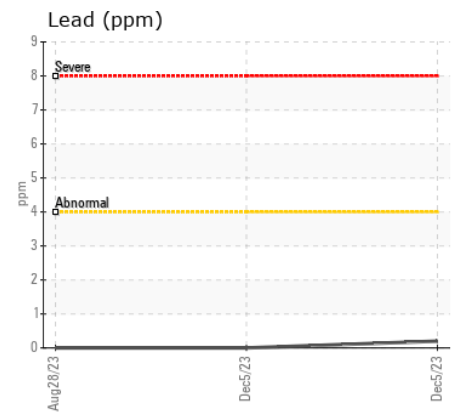
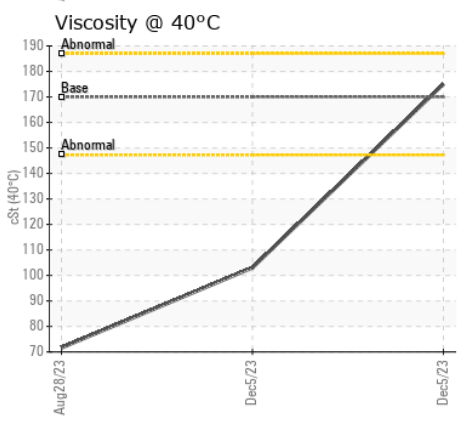
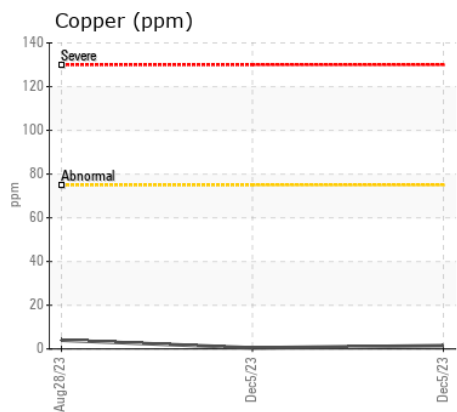
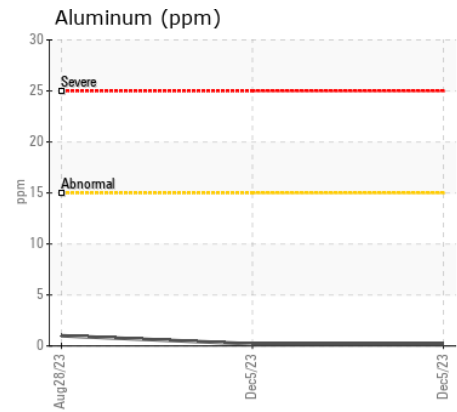
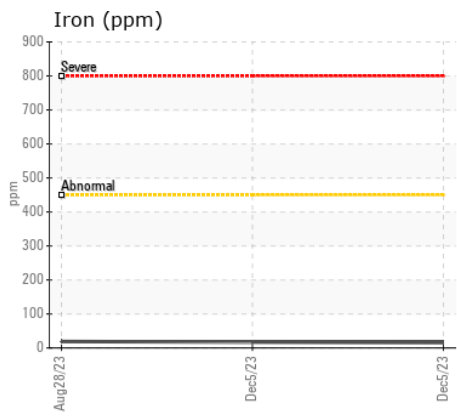
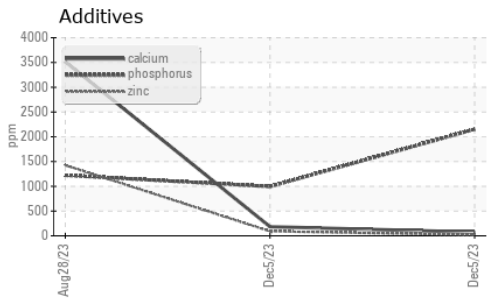
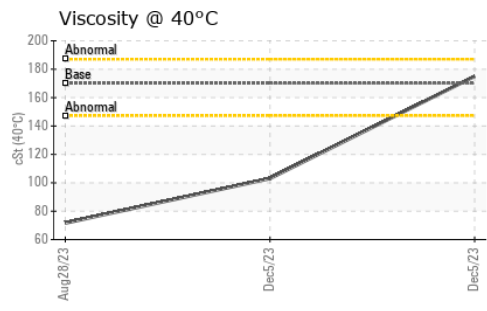
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>60	<b>&lt;1</b>	1	8
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	<1
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>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*	>0.2	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil.  
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>2</b>	3	16
Boron	ppm	ASTM D5185(m)	0	<b>2</b>	7	106
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	4
Magnesium	ppm	ASTM D5185(m)	<1	<b>1</b>	2	10
Calcium	ppm	ASTM D5185(m)	<1	<b>74</b>	184	3516
Phosphorus	ppm	ASTM D5185(m)	2143	<b>2153</b>	995	1222
Zinc	ppm	ASTM D5185(m)	<1	<b>16</b>	91	1425
Sulfur	ppm	ASTM D5185(m)	23468	<b>24200</b>	20142	2800
Visc @ 40°C	cSt	ASTM D7279(m)	170	<b>175</b>	103	71.6



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0282649 **Received** : 29 Apr 2024  
**Lab Number** : 02632044 **Tested** : 29 Apr 2024  
**Unique Number** : 5773197 **Diagnosed** : 29 Apr 2024 - Wes Davis  
**Test Package** : MOB 1

**CONTENEUR ROSE INC.**  
 89 RUE MORANE  
 LAVAL, QC  
 CA H7M 1R5  
 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: