



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR LH22M 146587-1250**  
Component  
**Swing Drive**  
Fluid  
**LIEBHERR GEAR BASIC 90 LS (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0282645</b>	LH0279511	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)	>1450	<b>79</b>	100	153
Chromium	ppm	ASTM D5185(m)	>11	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>3	<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)	>4	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>4	<b>0</b>	2	2
Copper	ppm	ASTM D5185(m)	>542	<b>23</b>	49	72
Tin	ppm	ASTM D5185(m)	>38	<b>1</b>	2	6
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

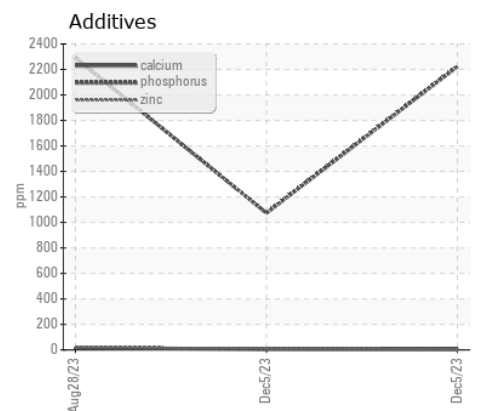
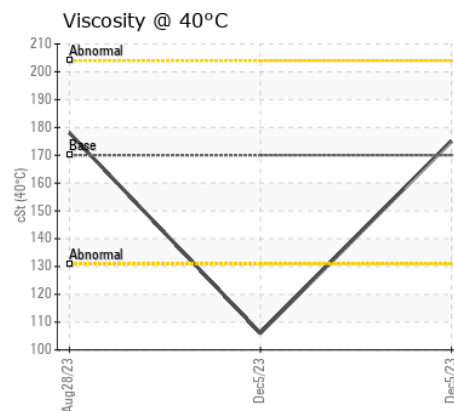
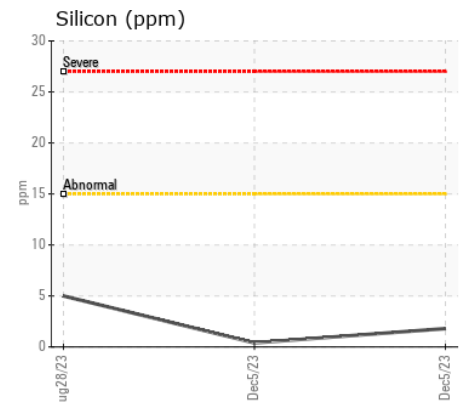
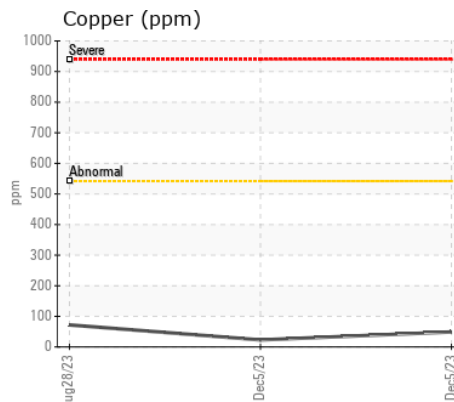
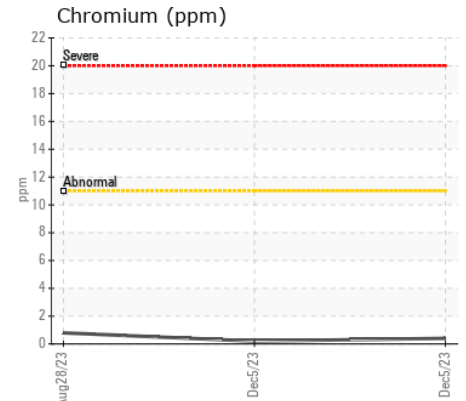
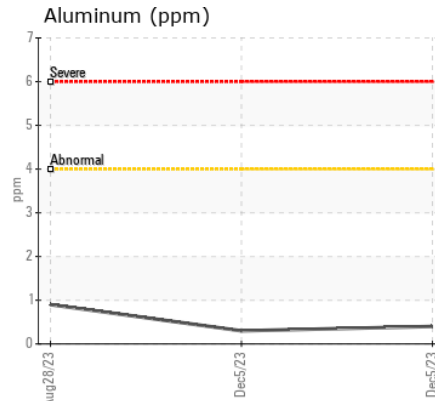
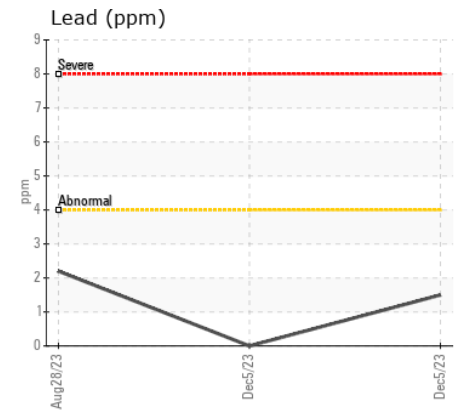
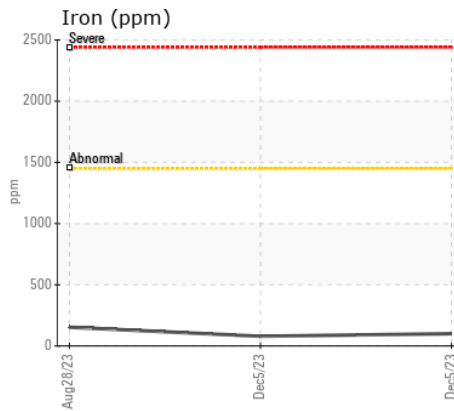
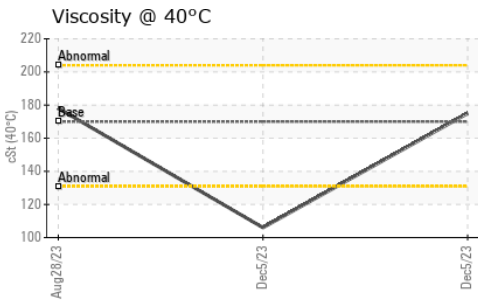
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	2	5
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	1
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	LIGHT
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

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

Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	2	5
Boron	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	3	7
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	1	3
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	2
Magnesium	ppm	ASTM D5185(m)	<1	<b>&lt;1</b>	0	2
Calcium	ppm	ASTM D5185(m)	<1	<b>2</b>	6	18
Phosphorus	ppm	ASTM D5185(m)	2143	<b>2223</b>	1074	2291
Zinc	ppm	ASTM D5185(m)	<1	<b>6</b>	8	23
Sulfur	ppm	ASTM D5185(m)	23468	<b>25300</b>	21374	24505
Visc @ 40°C	cSt	ASTM D7279(m)	170	<b>175</b>	106	178



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0282645 **Received** : 29 Apr 2024  
**Lab Number** : 02632040 **Tested** : 29 Apr 2024  
**Unique Number** : 5773193 **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: