



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR L586 064339**  
Component  
**Front Left Wheel Hub**  
Fluid  
**LIEBHERR GEAR BASIC 90 LS (--- LTR)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0280903</b>	LH0259978	LH0238468
Sample Date		Client Info		<b>04 Jan 2024</b>	01 Jul 2023	13 Oct 2022
Machine Age	kms	Client Info		<b>4167</b>	3090	0
Oil Age	kms	Client Info		<b>0</b>	0	0
Filter Age	kms	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
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)	>1625	<b>126</b>	91	95
Chromium	ppm	ASTM D5185(m)	>8	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<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)	>25	<b>1</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>8	<b>1</b>	1	1
Copper	ppm	ASTM D5185(m)	>150	<b>33</b>	52	53
Tin	ppm	ASTM D5185(m)	>10	<b>2</b>	3	3
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>VLITE</b>	NONE	NONE

### CONTAMINATION

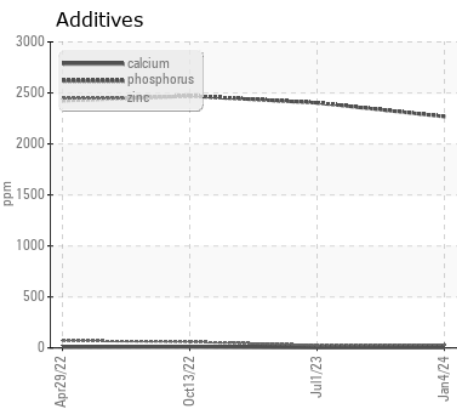
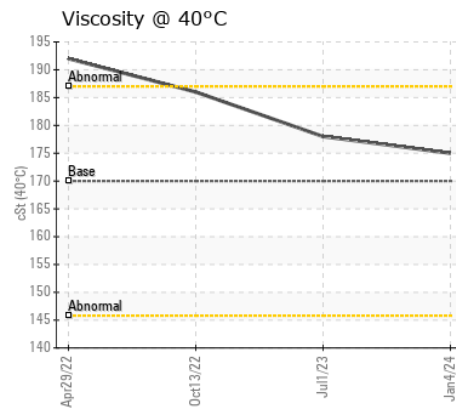
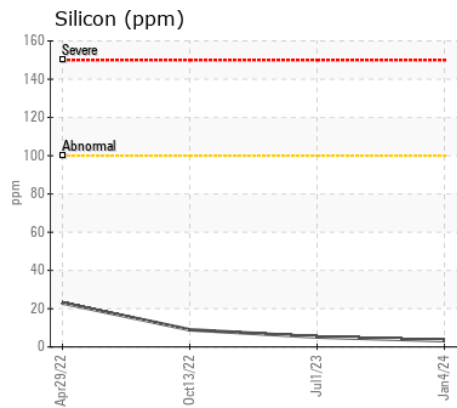
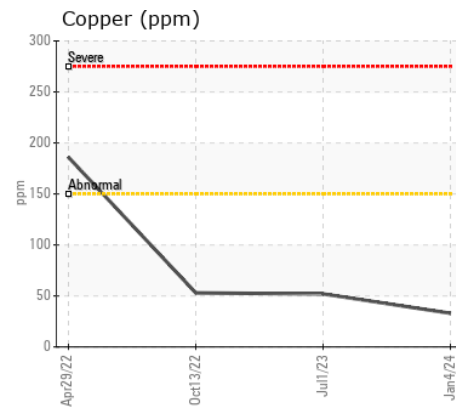
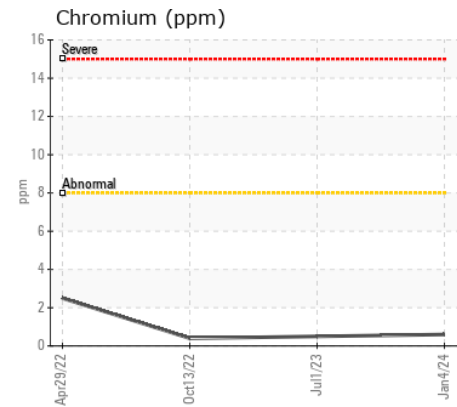
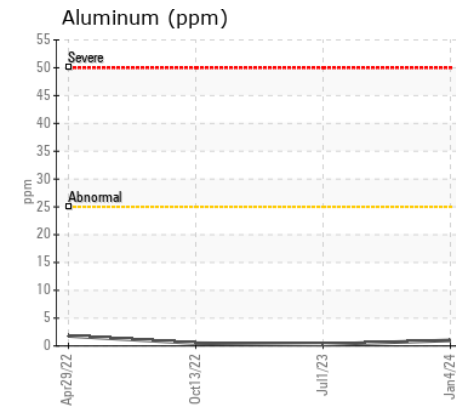
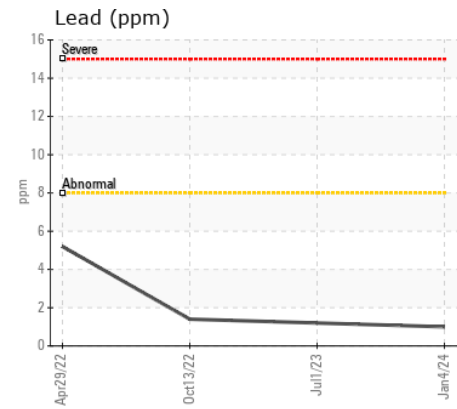
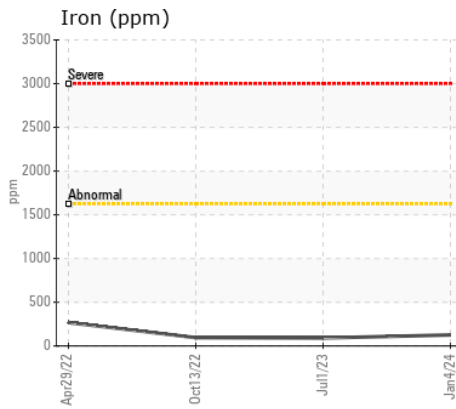
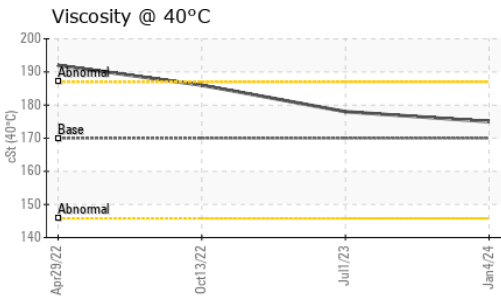
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>100	<b>3</b>	5	9
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>	VLITE	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

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

Sodium	ppm	ASTM D5185(m)		<b>2</b>	1	2
Boron	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	2
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Manganese	ppm	ASTM D5185(m)	0	<b>10</b>	7	16
Magnesium	ppm	ASTM D5185(m)	<1	<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185(m)	<1	<b>4</b>	4	12
Phosphorus	ppm	ASTM D5185(m)	2143	<b>2268</b>	2403	2470
Zinc	ppm	ASTM D5185(m)	<1	<b>32</b>	26	61
Sulfur	ppm	ASTM D5185(m)	23468	<b>25447</b>	25844	26548
Visc @ 40°C	cSt	ASTM D7279(m)	170	<b>175</b>	178	186



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0280903 **Received** : 10 Jan 2024  
**Lab Number** : 02607986 **Diagnosed** : 11 Jan 2024  
**Unique Number** : 5709072 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1

**Quality Concrete Inc.**  
 35 Lafarge Lane  
 Folly Lake, NS  
 CA B0M 1M0  
 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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