



# LIEBHERR

## OIL ANALYSIS REPORT

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



Area  
**(358361)**  
Machine Id  
**LIEBHERR LH40M 133820-1215**  
Component  
**Front Differential**  
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>LH0289650</b>	LH0203065	LH0227574
Sample Date		Client Info		<b>10 Jun 2024</b>	31 Aug 2022	09 Mar 2022
Machine Age	hrs	Client Info		<b>2606</b>	1001	509
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	Changed
Filter Changed		Client Info		<b>None</b>	None	None
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>150	<b>6</b>	4	11
Chromium	ppm	ASTM D5185(m)	>5	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>10	<b>0</b>	0	<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)	>5	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	0
Copper	ppm	ASTM D5185(m)	>125	<b>6</b>	11	7
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
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

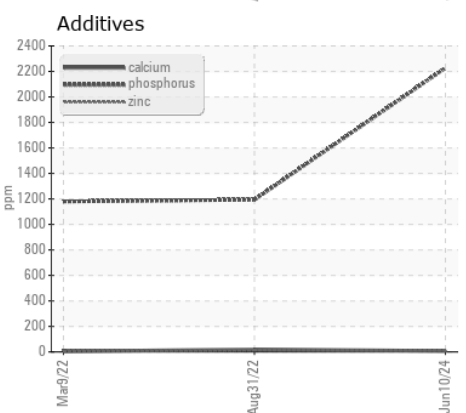
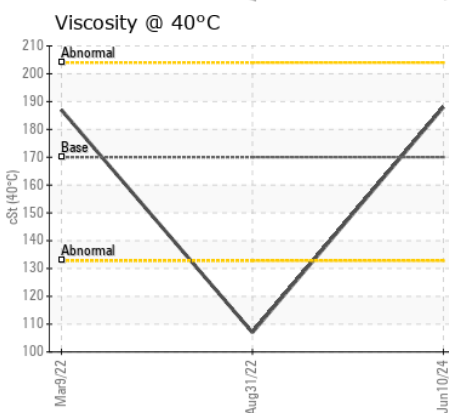
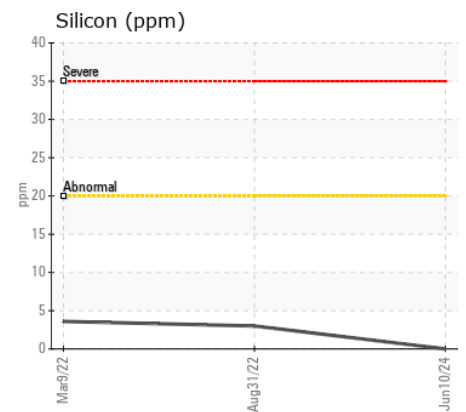
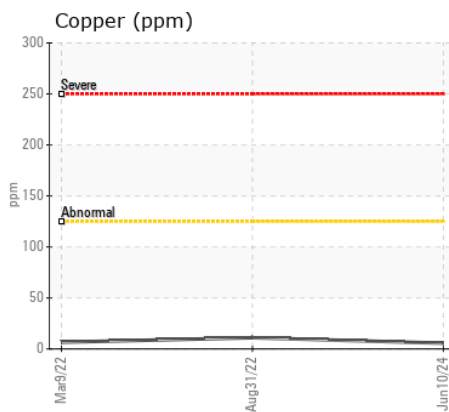
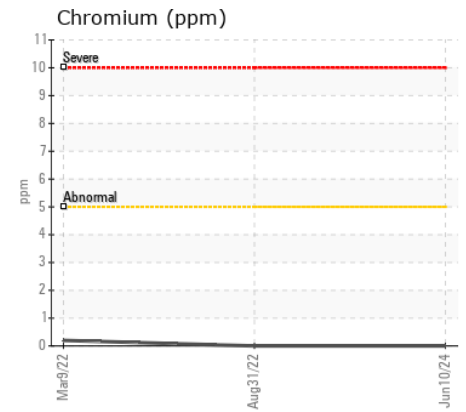
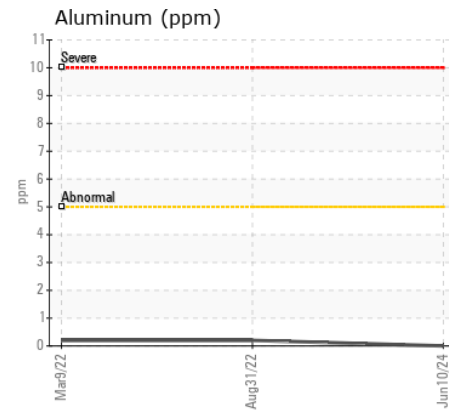
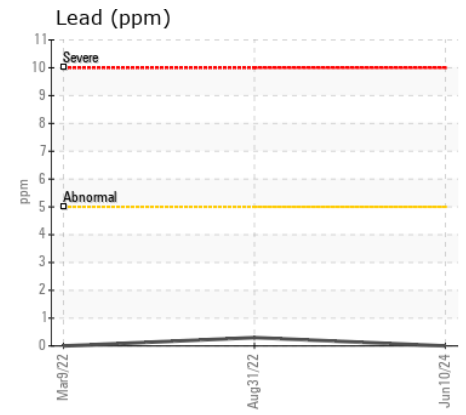
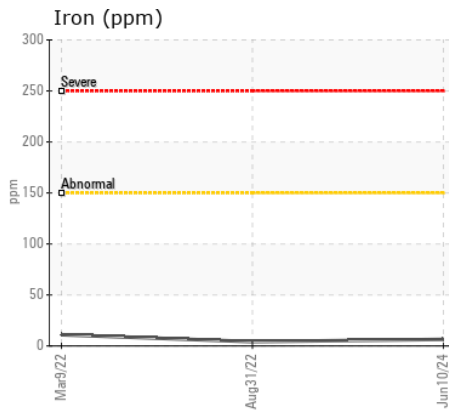
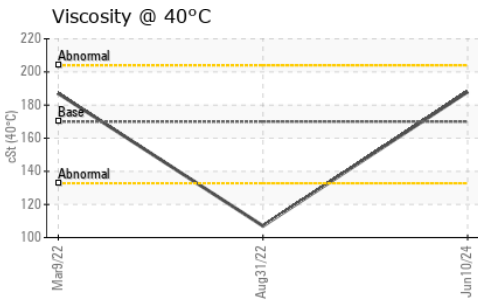
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<b>0</b>	3	4
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	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	VLITE
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	3
Boron	ppm	ASTM D5185(m)	0	<b>5</b>	300	3
Barium	ppm	ASTM D5185(m)	0	<b>2</b>	9	347
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	<1	<b>&lt;1</b>	2	<1
Calcium	ppm	ASTM D5185(m)	<1	<b>9</b>	20	5
Phosphorus	ppm	ASTM D5185(m)	2143	<b>2227</b>	1194	1180
Zinc	ppm	ASTM D5185(m)	<1	<b>7</b>	14	6
Sulfur	ppm	ASTM D5185(m)	23468	<b>26543</b>	20972	28559
Visc @ 40°C	cSt	ASTM D7279(m)	170	<b>188</b>	107	187



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0289650 **Received** : 11 Jun 2024  
**Lab Number** : 02641234 **Tested** : 11 Jun 2024  
**Unique Number** : 5798773 **Diagnosed** : 11 Jun 2024 - Wes Davis  
**Test Package** : MOB 1

**METALOGICS INC.**  
 895 COLLINSON RD.  
 DUNDAS, ON  
 CA L9H 5E2  
 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: