



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR LH60M 146313-1217**  
Component  
**Rear Differential**  
Fluid  
**GEAR OIL SAE 80W90 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0286925</b>	LH0278929	LH0274552
Sample Date		Client Info		<b>17 Jun 2024</b>	21 Jan 2024	05 Sep 2023
Machine Age	hrs	Client Info		<b>3178</b>	2083	1114
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	N/A
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)	>150	<b>20</b>	23	9
Chromium	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	0	0
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>&lt;1</b>	<1	0
Lead	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>125	<b>14</b>	15	37
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	LIGHT
Yellow Metal	scalar	Visual*	NONE	<b>VLITE</b>	NONE	VLITE

### CONTAMINATION

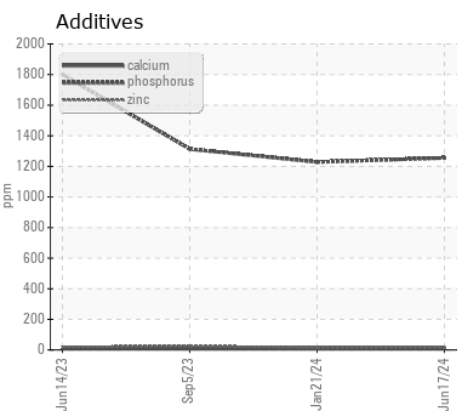
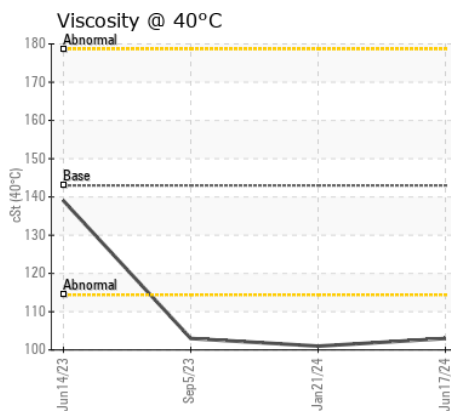
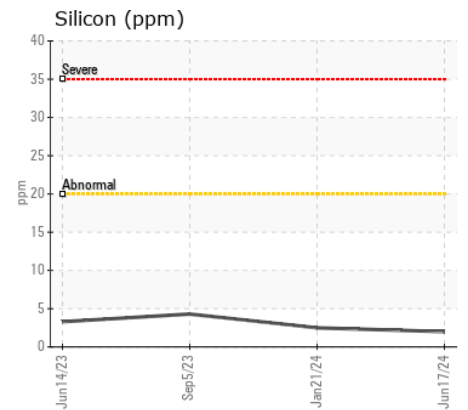
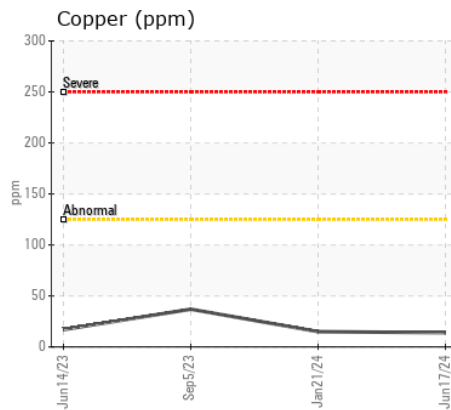
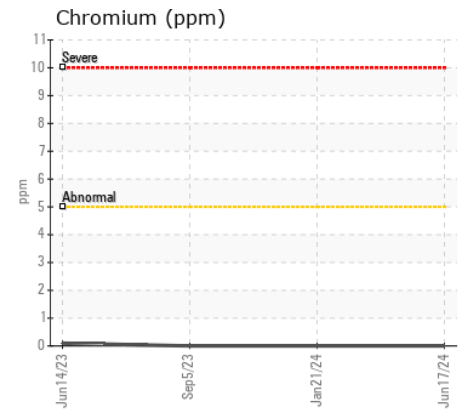
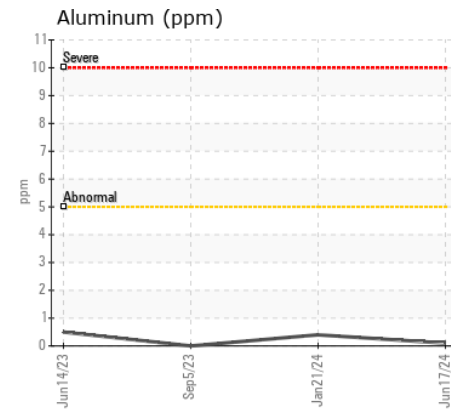
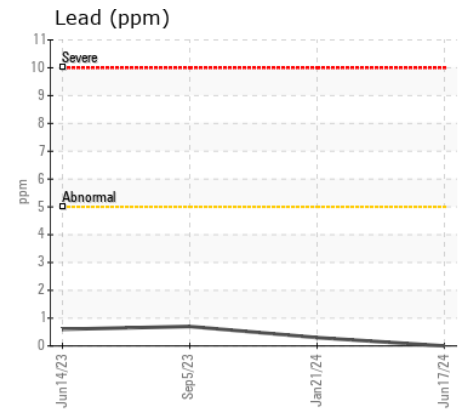
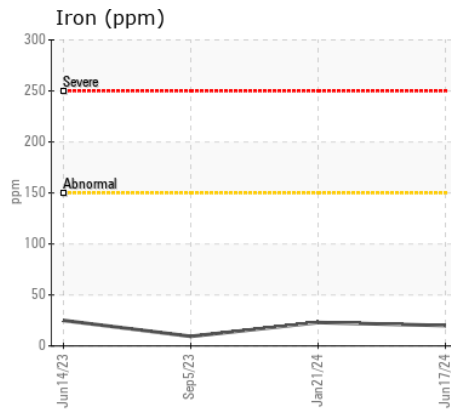
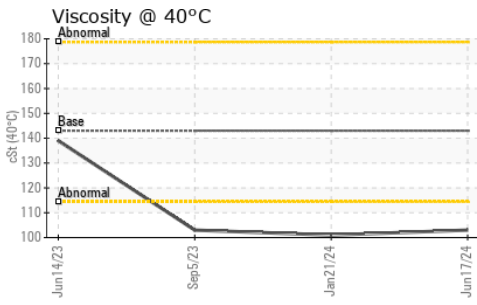
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<b>2</b>	2	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	VLITE
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)	>170	<b>&lt;1</b>	<1	<1
Boron	ppm	ASTM D5185(m)	400	<b>309</b>	306	314
Barium	ppm	ASTM D5185(m)	200	<b>0</b>	0	1
Molybdenum	ppm	ASTM D5185(m)	12	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	12	<b>1</b>	1	2
Calcium	ppm	ASTM D5185(m)	150	<b>13</b>	10	10
Phosphorus	ppm	ASTM D5185(m)	1650	<b>1255</b>	1228	1313
Zinc	ppm	ASTM D5185(m)	125	<b>16</b>	15	25
Sulfur	ppm	ASTM D5185(m)	22500	<b>21497</b>	20931	21158
Visc @ 40°C	cSt	ASTM D7279(m)	143	<b>103</b>	101	103



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0286925  
**Lab Number** : 02642643  
**Unique Number** : 5800182  
**Test Package** : MOB 1

**WENTWORTH METAL RECYCLING**  
 495 WENTWORTH STREET NORTH  
 HAMILTON, ON  
 CA L8L 5X1  
 Contact: Jaason  
 jaason@wentworthrecycling.com

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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