



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR LH60M 119208-1217**  
Component  
**Rear 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>LH0267398</b>	LH0200265	---
Sample Date		Client Info		<b>04 Jan 2024</b>	30 Nov 2022	---
Machine Age	hrs	Client Info		<b>4478</b>	1763	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	---
Filter Changed		Client Info		<b>N/A</b>	Not Changd	---
Sample Status				<b>NORMAL</b>	ABNORMAL	---

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	<b>18</b>	15	---
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	---
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>5	<b>2</b>	<1	---
Lead	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	---
Copper	ppm	ASTM D5185m	>125	<b>6</b>	4	---
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

### CONTAMINATION

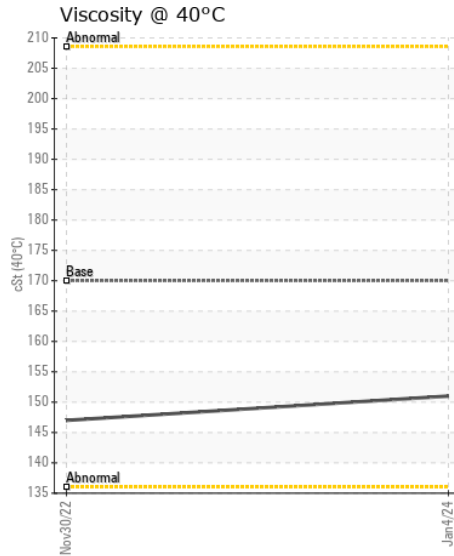
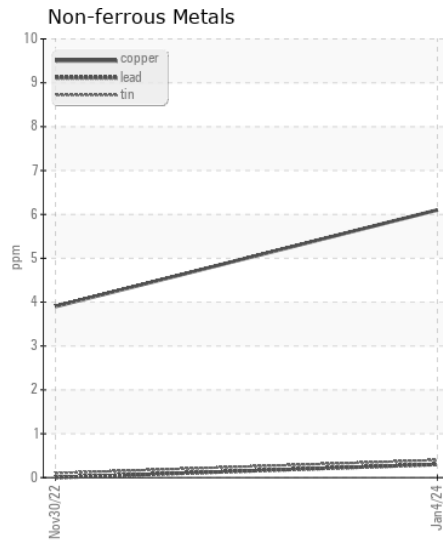
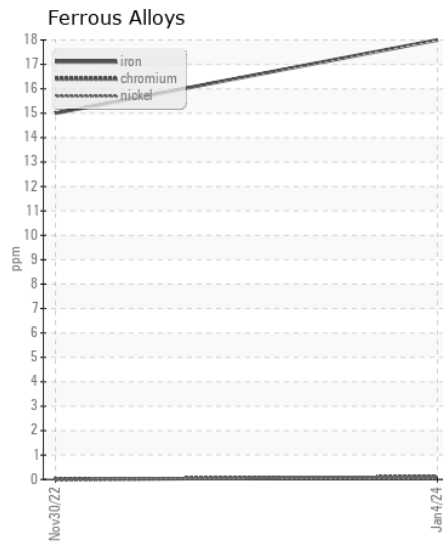
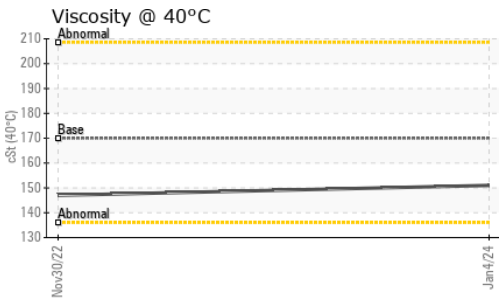
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	---
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	▲ MODER	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	---

### FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<b>0</b>	<1	---
Boron	ppm	ASTM D5185m	0	<b>183</b>	194	---
Barium	ppm	ASTM D5185m	0	<b>35</b>	14	---
Molybdenum	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	---
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m	<1	<b>0</b>	0	---
Calcium	ppm	ASTM D5185m	<1	<b>5</b>	8	---
Phosphorus	ppm	ASTM D5185m	2143	<b>1062</b>	1130	---
Zinc	ppm	ASTM D5185m	<1	<b>0</b>	11	---
Sulfur	ppm	ASTM D5185m	23468	<b>28887</b>	30586	---
Visc @ 40°C	cSt	ASTM D445	170	<b>151</b>	147	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LH0267398 **Received** : 08 Jan 2024  
**Lab Number** : 06054385 **Diagnosed** : 10 Jan 2024  
**Unique Number** : 10820334 **Diagnostician** : Jonathan Hester  
**Test Package** : CONST

**TT & E IRON**  
 1529 WEST GARNER RD  
 GARNER, NC  
 US 27529  
 Contact: MICHAEL STANCIL  
 culaterprowler@aol.com  
 T: (919)524-4326  
 F:

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)