



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR LH40M 1215-124371**  
Component  
**Front 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>LH0236271</b>	LH0213412	---
Sample Date		Client Info		<b>06 Sep 2022</b>	24 Feb 2022	---
Machine Age	hrs	Client Info		<b>1949</b>	1033	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Not Changed</b>	None	---
Sample Status				<b>NORMAL</b>	NORMAL	---

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	<b>4</b>	77	---
Chromium	ppm	ASTM D5185m	>5	<b>0</b>	<1	---
Nickel	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185m	>5	<b>1</b>	2	---
Lead	ppm	ASTM D5185m	>5	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m	>125	<b>6</b>	40	---
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

### CONTAMINATION

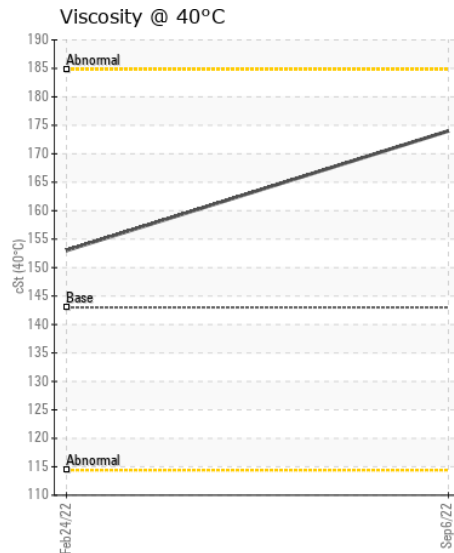
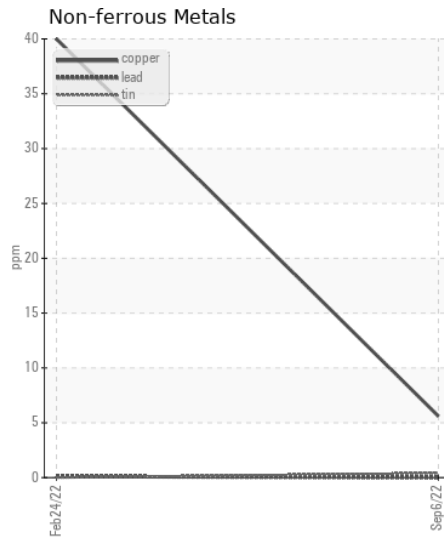
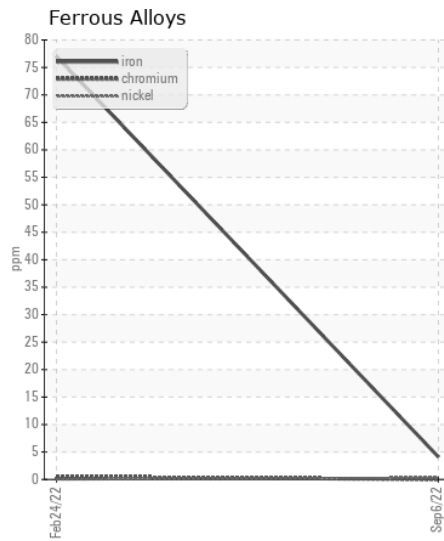
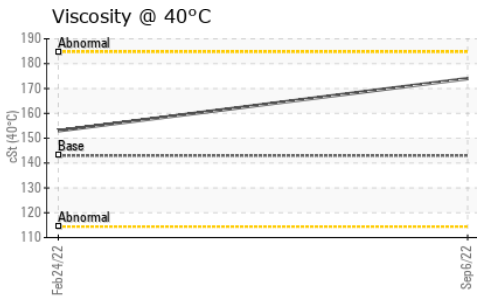
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>&lt;1</b>	12	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	1	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
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

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

Sodium	ppm	ASTM D5185m	>170	<b>2</b>	11	---
Boron	ppm	ASTM D5185m	400	<b>2</b>	7	---
Barium	ppm	ASTM D5185m	200	<b>42</b>	0	---
Molybdenum	ppm	ASTM D5185m	12	<b>0</b>	2	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	3	---
Magnesium	ppm	ASTM D5185m	12	<b>&lt;1</b>	2	---
Calcium	ppm	ASTM D5185m	150	<b>9</b>	283	---
Phosphorus	ppm	ASTM D5185m	1650	<b>2163</b>	2313	---
Zinc	ppm	ASTM D5185m	125	<b>6</b>	94	---
Sulfur	ppm	ASTM D5185m	22500	<b>25056</b>	24351	---
Visc @ 40°C	cSt	ASTM D445	143	<b>174</b>	153	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LH0236271  
**Lab Number** : 05640523  
**Unique Number** : 10130053  
**Test Package** : CONST

**Received** : 13 Sep 2022  
**Tested** : 14 Sep 2022  
**Diagnosed** : 15 Sep 2022 - Angela Borella

**SADOFF IRON AND METAL**  
 240 ARNDT STREET  
 FOND DU LAC, WI  
 US 54936  
 Contact: DAVE CASPER  
 casperd@sadoff.com

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)

T:  
F: