



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR LH40M 1215-124371**  
Component  
**Rear Right Wheel Hub**  
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>LH05751109</b>	LH0236264	LH0213422
Sample Date		Client Info		<b>20 Jan 2023</b>	06 Sep 2022	24 Feb 2022
Machine Age	hrs	Client Info		<b>2616</b>	1949	1033
Oil Age	hrs	Client Info		<b>671</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Not Changed	None
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>650	<b>11</b>	13	28
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>25	<b>0</b>	<1	0
Lead	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>60	<b>3</b>	9	27
Tin	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>MODER</b>	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

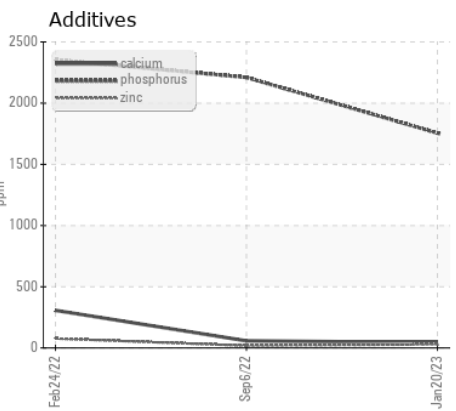
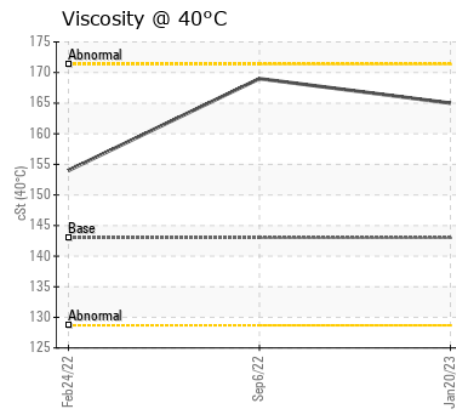
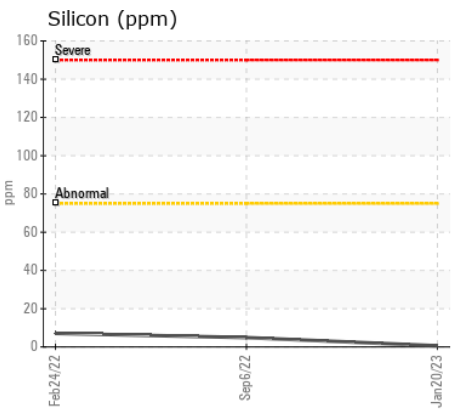
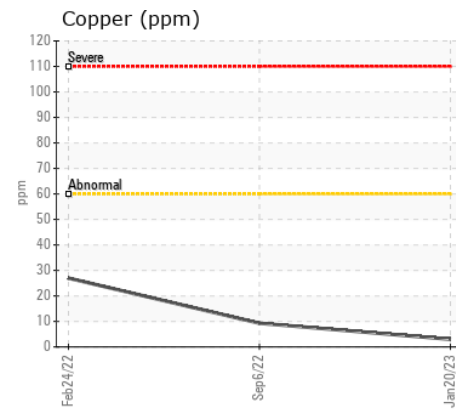
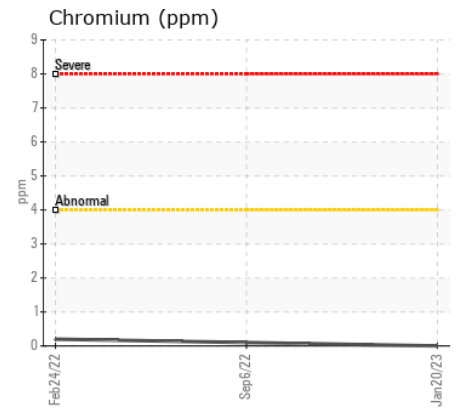
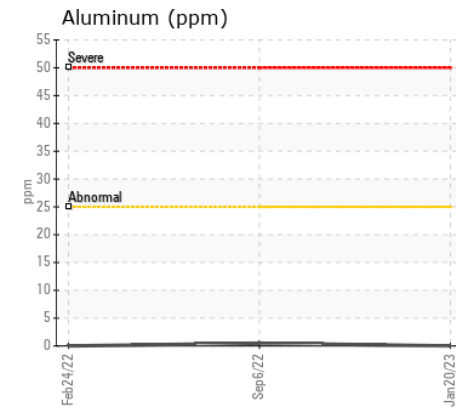
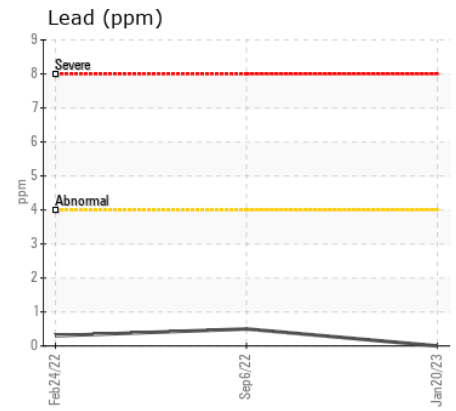
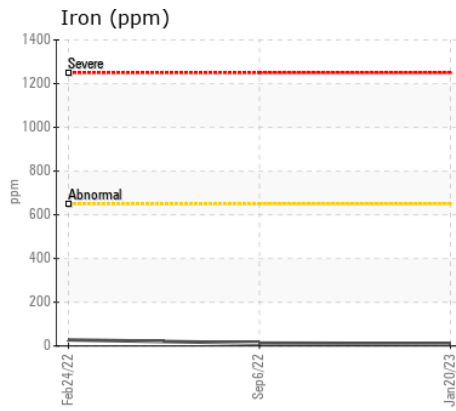
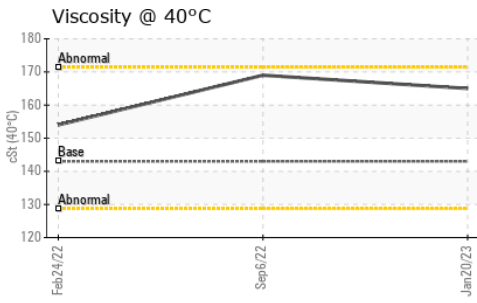
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>&lt;1</b>	5	7
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	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	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

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

Sodium	ppm	ASTM D5185m	>170	<b>3</b>	7	4
Boron	ppm	ASTM D5185m	400	<b>7</b>	11	10
Barium	ppm	ASTM D5185m	200	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	12	<b>2</b>	<1	2
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	2
Magnesium	ppm	ASTM D5185m	12	<b>12</b>	<1	2
Calcium	ppm	ASTM D5185m	150	<b>44</b>	58	307
Phosphorus	ppm	ASTM D5185m	1650	<b>1755</b>	2210	2354
Zinc	ppm	ASTM D5185m	125	<b>28</b>	18	77
Sulfur	ppm	ASTM D5185m	22500	<b>30887</b>	25056	26286
Visc @ 40°C	cSt	ASTM D445	143	<b>165</b>	169	154



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LH05751109      **Received** : 26 Jan 2023  
**Lab Number** : 05751109      **Tested** : 27 Jan 2023  
**Unique Number** : 10310713      **Diagnosed** : 27 Jan 2023 - Sean Felton  
**Test Package** : MOBCE

**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)

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F: