



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR LH40M 122207-1215**  
Component  
**Hydraulic System**  
Fluid  
**{not provided} (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0273225</b>	LH0244669	---
Sample Date		Client Info		<b>08 Jan 2024</b>	17 May 2023	---
Machine Age	hrs	Client Info		<b>3977</b>	2962	---
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>	Changed	---
Filter Changed		Client Info		<b>N/A</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>60	<b>16</b>	28	---
Chromium	ppm	ASTM D5185m	>40	<b>2</b>	4	---
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>5	<b>0</b>	0	---
Lead	ppm	ASTM D5185m	>5	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m	>15	<b>2</b>	3	---
Tin	ppm	ASTM D5185m	>5	<b>0</b>	<1	---
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

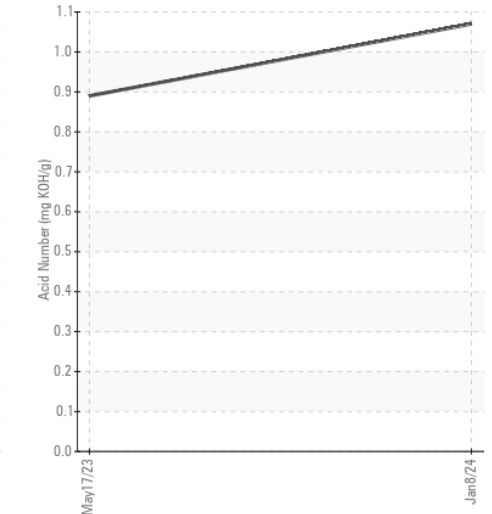
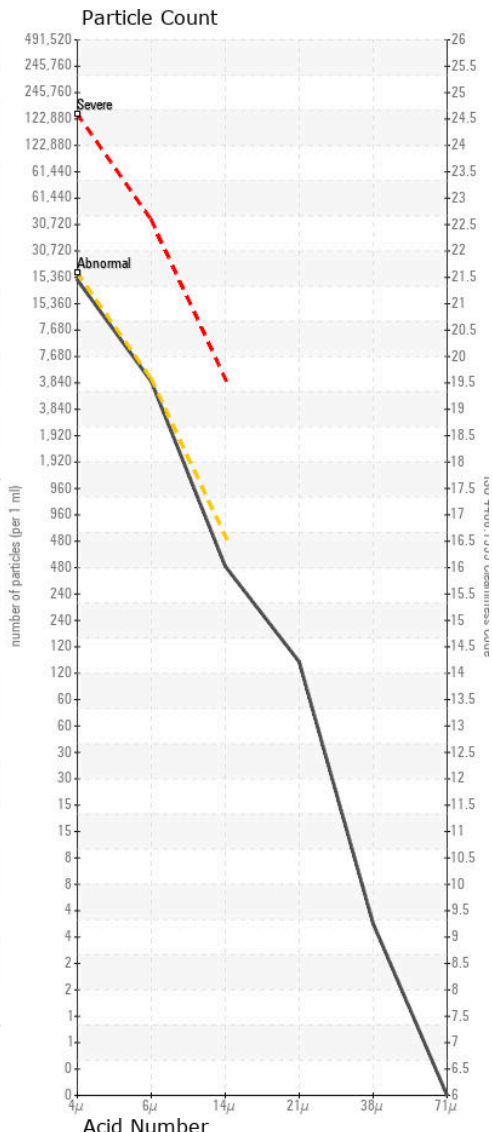
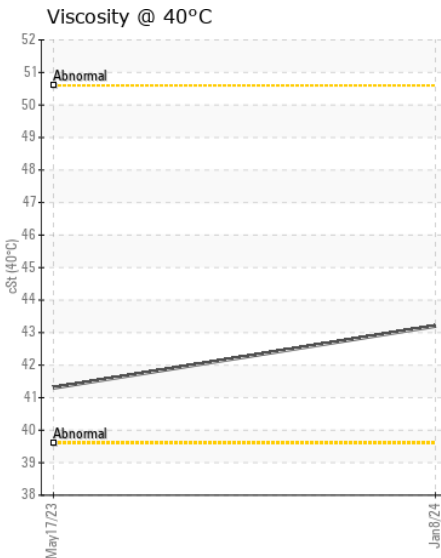
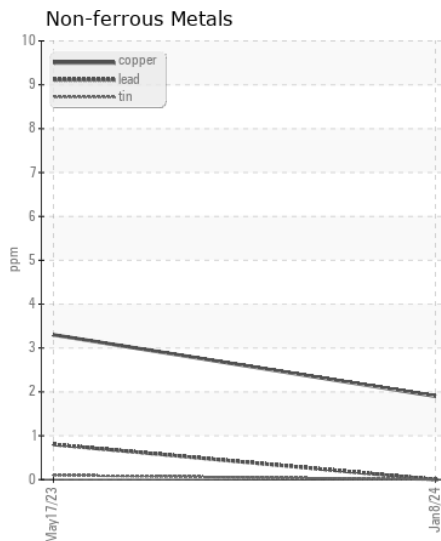
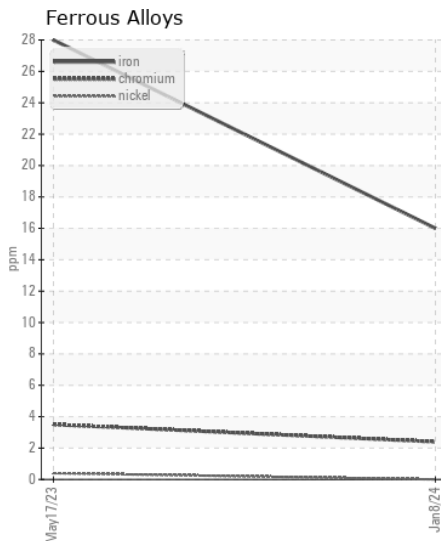
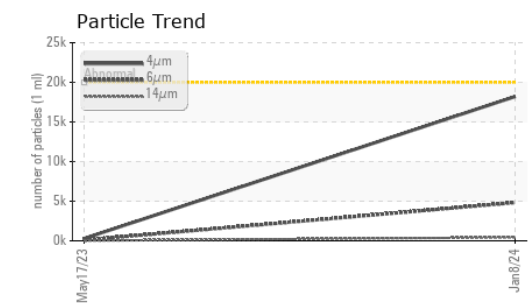
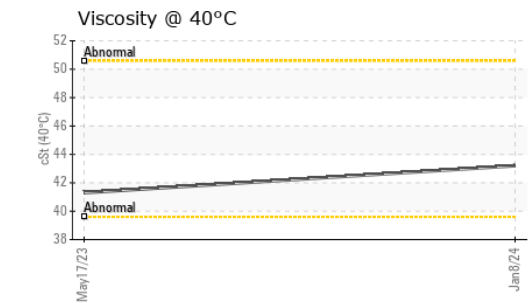
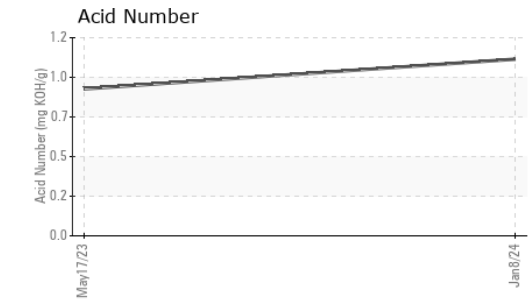
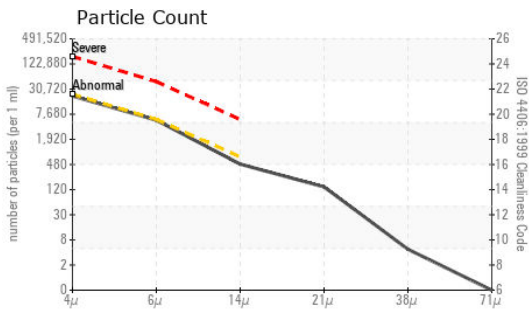
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>15	<b>1</b>	2	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	---
Water		WC Method	>0.1	<b>NEG</b>	NEG	---
Particles >4µm		ASTM D7647	>20000	<b>18208</b>	284	---
Particles >6µm		ASTM D7647	>5000	<b>4821</b>	88	---
Particles >14µm		ASTM D7647	>640	<b>430</b>	16	---
Particles >21µm		ASTM D7647	>160	<b>123</b>	6	---
Particles >38µm		ASTM D7647	>40	<b>4</b>	0	---
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>21/19/16</b>	15/14/11	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	---
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	>0.1	<b>NEG</b>	NEG	---

### FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>2</b>	<1	---
Boron	ppm	ASTM D5185m		<b>0</b>	0	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	---
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>0</b>	9	---
Calcium	ppm	ASTM D5185m		<b>1046</b>	1066	---
Phosphorus	ppm	ASTM D5185m		<b>531</b>	512	---
Zinc	ppm	ASTM D5185m		<b>612</b>	651	---
Sulfur	ppm	ASTM D5185m		<b>4164</b>	4840	---
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.07</b>	0.89	---
Visc @ 40°C	cSt	ASTM D445		<b>43.2</b>	41.3	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LH0273225 **Received** : 16 Jan 2024  
**Lab Number** : 06060984 **Diagnosed** : 17 Jan 2024  
**Unique Number** : 10832366 **Diagnostician** : Jonathan Hester  
**Test Package** : CONST

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)

**RECO EQUIPMENT INC.**  
 1040 REED DRIVE  
 MONROE, OH  
 US 45050  
 Contact: Eric Hansen  
 ehansen@recoequip.com  
 T: (513)539-5255  
 F: (513)539-5256