



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR L550 017976**  
Component  
**Hydraulic System**  
Fluid  
**{not provided} (--- GAL)**

### RECOMMENDATION

We advise that you check for visible metal particles in the oil. We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0277614</b>	LHMC011007	---
Sample Date		Client Info		<b>08 Jan 2024</b>	29 Jul 2009	---
Machine Age	hrs	Client Info		<b>5671</b>	2370	---
Oil Age	hrs	Client Info		<b>0</b>	2370	---
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>ABNORMAL</b>	ABNORMAL	---

### WEAR

Light concentration of visible metal present.

Iron	ppm	ASTM D5185(m)	>20	<b>10</b>	4	---
Chromium	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	2	---
Nickel	ppm	ASTM D5185(m)	>10	<b>0</b>	1	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	---
Silver	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185(m)	>10	<b>3</b>	<1	---
Lead	ppm	ASTM D5185(m)	>10	<b>2</b>	17	---
Copper	ppm	ASTM D5185(m)	>75	<b>32</b>	4	---
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---
White Metal	scalar	Visual*	NONE	<b>▲ LIGHT</b>	NONE	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	---

### CONTAMINATION

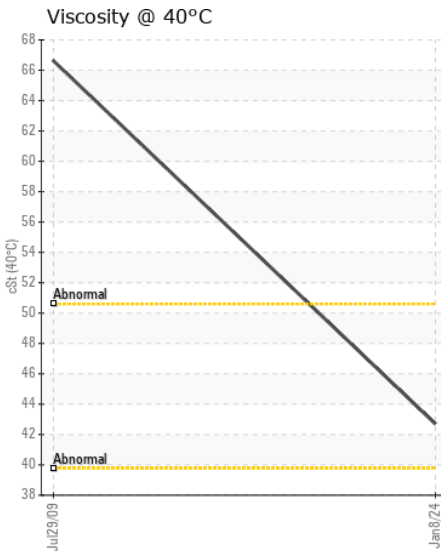
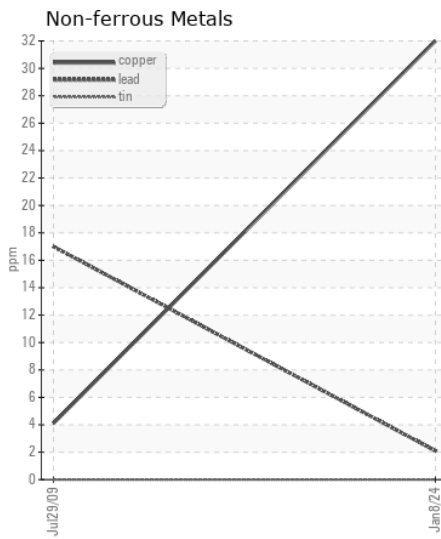
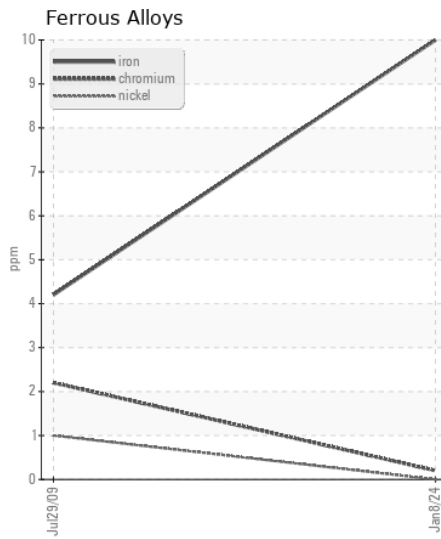
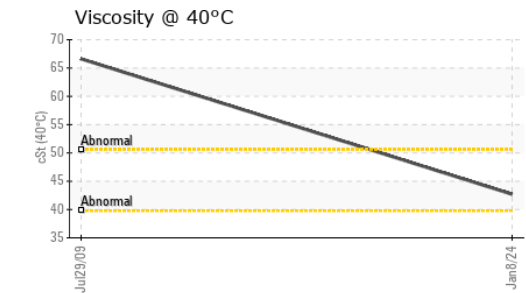
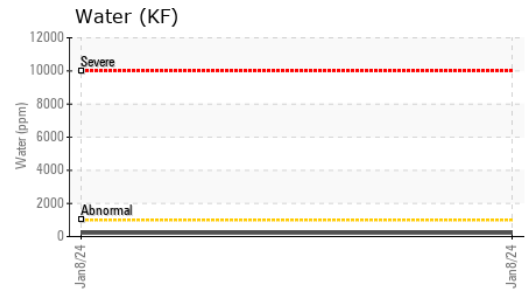
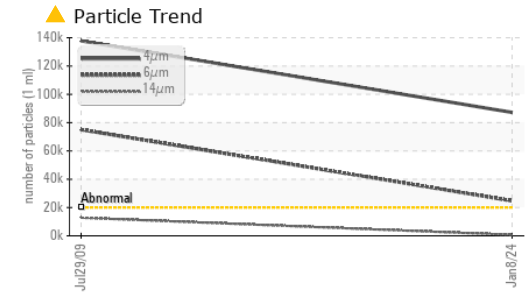
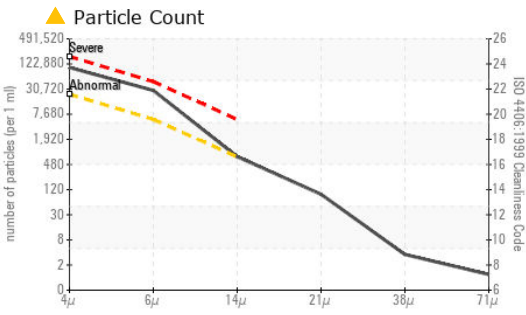
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible.

Silicon	ppm	ASTM D5185(m)	>20	<b>4</b>	2	---
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	0	---
Water	%	ASTM D6304*	>0.1	<b>0.022</b>	---	---
ppm Water	ppm	ASTM D6304*	>1000	<b>221</b>	---	---
Particles >4µm		ASTM D7647	>20000	<b>▲ 87216</b>	137768	---
Particles >6µm		ASTM D7647	>5000	<b>▲ 24682</b>	▲ 75048	---
Particles >14µm		ASTM D7647	>640	<b>▲ 650</b>	▲ 12786	---
Particles >21µm		ASTM D7647	>160	<b>82</b>	▲ 4314	---
Particles >38µm		ASTM D7647	>40	<b>3</b>	▲ 666	---
Particles >71µm		ASTM D7647	>10	<b>1</b>	▲ 68	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>▲ 24/22/17</b>	▲ 24/23/21	---
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>.2%</b>	NEG	---

### FLUID CONDITION

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185(m)		<b>8</b>	3	---
Boron	ppm	ASTM D5185(m)		<b>&lt;1</b>	4	---
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	0	---
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185(m)		<b>5</b>	8	---
Calcium	ppm	ASTM D5185(m)		<b>653</b>	1297	---
Phosphorus	ppm	ASTM D5185(m)		<b>429</b>	336	---
Zinc	ppm	ASTM D5185(m)		<b>517</b>	395	---
Sulfur	ppm	ASTM D5185(m)		<b>1974</b>	3521	---
Visc @ 40°C	cSt	ASTM D7279(m)		<b>42.7</b>	66.62	---



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0277614 **Received** : 09 Jan 2024  
**Lab Number** : **02607551** **Diagnosed** : 11 Jan 2024  
**Unique Number** : 5708637 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: Bottom, BottomAnalysis, FilterPatch, KF, PrtCount, PrtFilter )

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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