



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR LH26M 124532-1252**  
Component  
**Swing Drive**  
Fluid  
**GEAR OIL SAE 75W90 (--- GAL)**

### RECOMMENDATION

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0181007</b>	LH0180994	LH0180981
Sample Date		Client Info		<b>10 Jan 2023</b>	04 Apr 2022	02 Jul 2021
Machine Age	hrs	Client Info		<b>3035</b>	1978	932
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>None</b>	None	None
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

### WEAR

Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

PQ		ASTM D8184*		<b>0</b>	---	---
Iron	ppm	ASTM D5185(m)	>350	<b>▲ 544</b>	52	117
Chromium	ppm	ASTM D5185(m)	>15	<b>3</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>10	<b>2</b>	1	<1
Copper	ppm	ASTM D5185(m)	>300	<b>75</b>	51	19
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

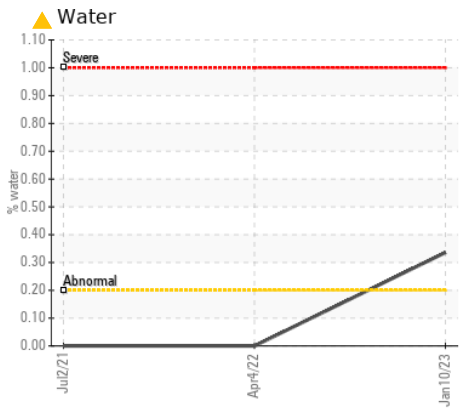
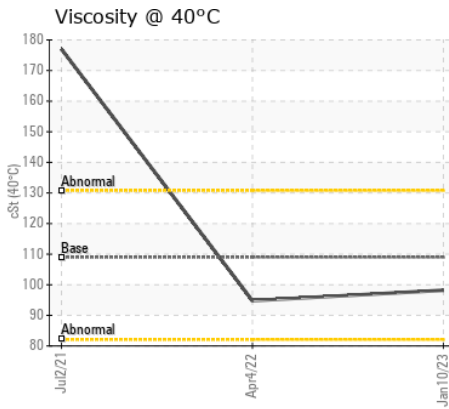
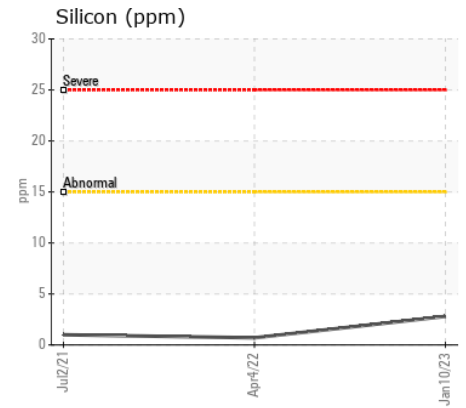
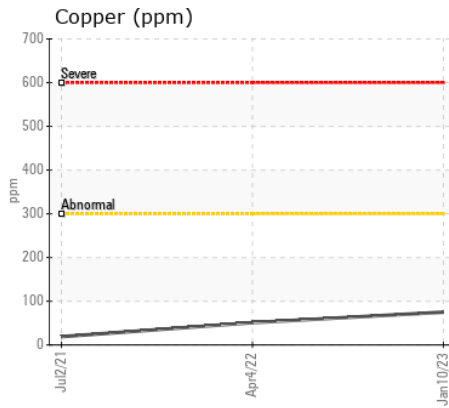
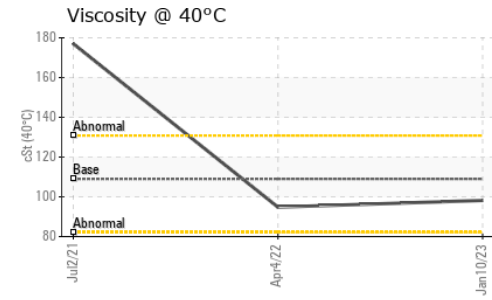
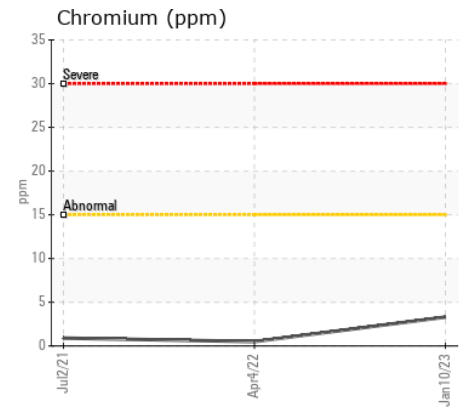
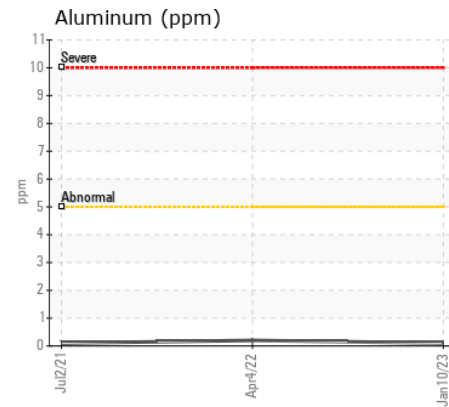
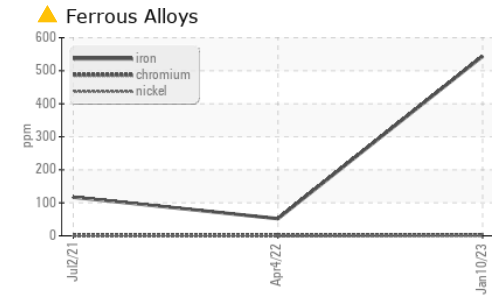
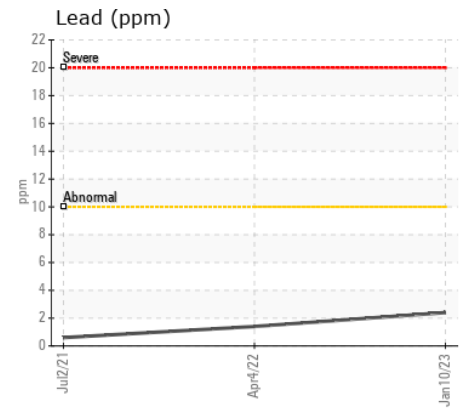
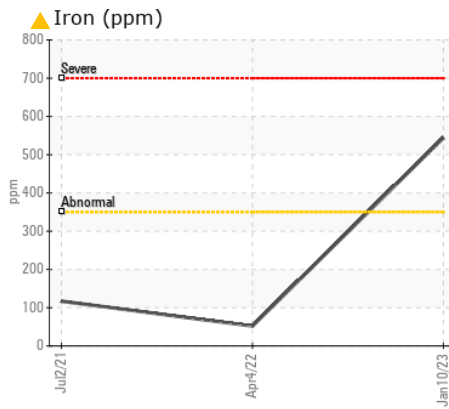
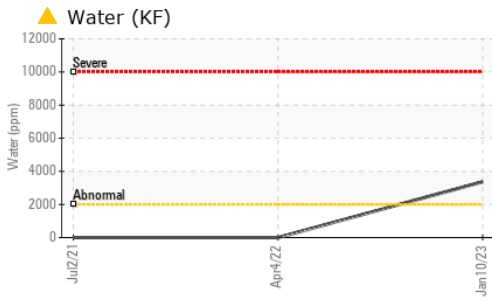
There is a moderate concentration of water present in the oil.

Silicon	ppm	ASTM D5185(m)	>15	<b>3</b>	<1	1
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	1
Water	%	ASTM D6304*	>0.2	<b>▲ 0.336</b>	---	---
ppm Water	ppm	ASTM D6304*	>2000	<b>▲ 3368.5</b>	---	---
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>▲ .2%</b>	NEG	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>2</b>	1	4
Boron	ppm	ASTM D5185(m)	400	<b>218</b>	280	27
Barium	ppm	ASTM D5185(m)	200	<b>0</b>	2	6
Molybdenum	ppm	ASTM D5185(m)	12	<b>&lt;1</b>	<1	0
Manganese	ppm	ASTM D5185(m)		<b>4</b>	<1	1
Magnesium	ppm	ASTM D5185(m)	12	<b>3</b>	2	<1
Calcium	ppm	ASTM D5185(m)	150	<b>21</b>	10	16
Phosphorus	ppm	ASTM D5185(m)	1650	<b>1325</b>	1326	2291
Zinc	ppm	ASTM D5185(m)	125	<b>27</b>	10	15
Sulfur	ppm	ASTM D5185(m)	22500	<b>22100</b>	20867	25739
Visc @ 40°C	cSt	ASTM D7279(m)	109	<b>98.2</b>	94.8	177



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0181007 **Received** : 13 Jan 2023  
**Lab Number** : 02533173 **Tested** : 16 Jan 2023  
**Unique Number** : 5514172 **Diagnosed** : 16 Jan 2023 - Kevin Marson  
**Test Package** : MOBCE ( Additional Tests: KF, PQ, Visual )

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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