



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR LH50 1216-123739**  
Component  
**Swing Drive**  
Fluid  
**GEAR OIL SAE 75W90 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0211713</b>	LH0211685	LH0211657
Sample Date		Client Info		<b>17 Jun 2024</b>	31 Jan 2024	09 Aug 2023
Machine Age	hrs	Client Info		<b>12322</b>	10743	8617
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>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>None</b>	Not Changd	None
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>1450	<b>382</b>	376	321
Chromium	ppm	ASTM D5185m	>11	<b>2</b>	2	2
Nickel	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	<1
Lead	ppm	ASTM D5185m	>4	<b>0</b>	0	1
Copper	ppm	ASTM D5185m	>542	<b>253</b>	240	171
Tin	ppm	ASTM D5185m	>38	<b>26</b>	22	16
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

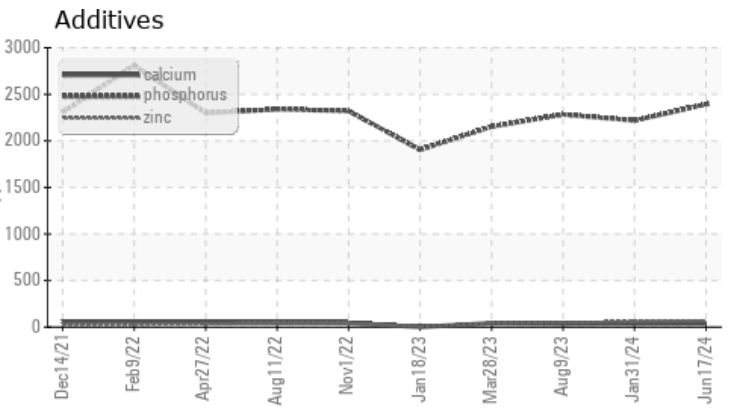
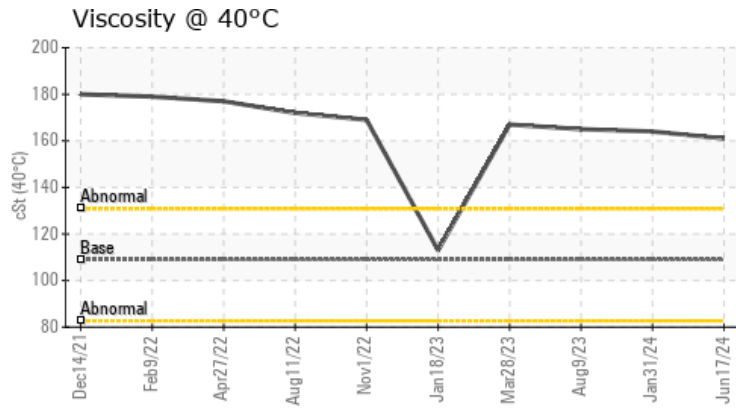
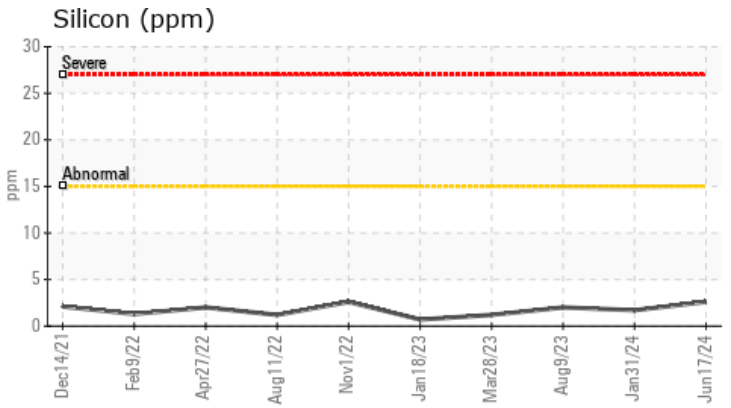
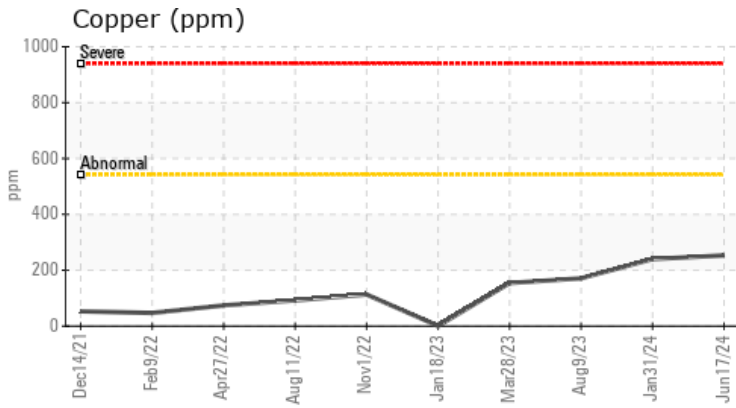
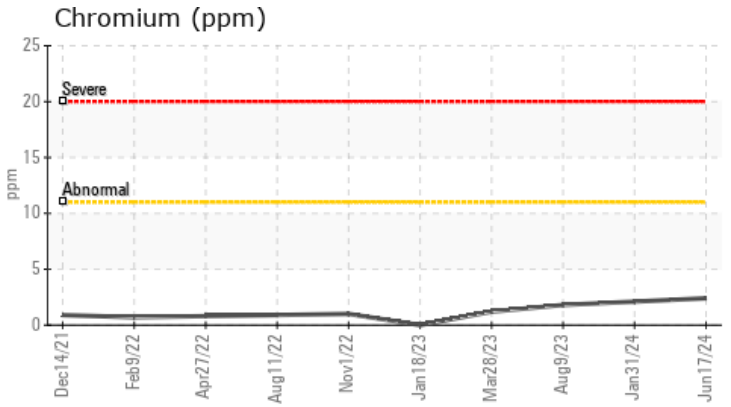
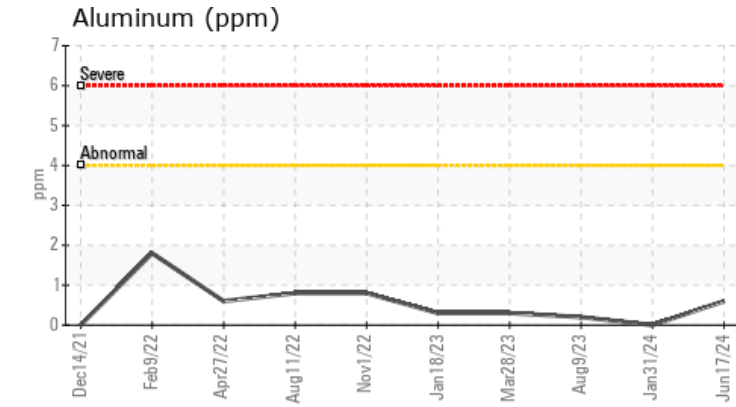
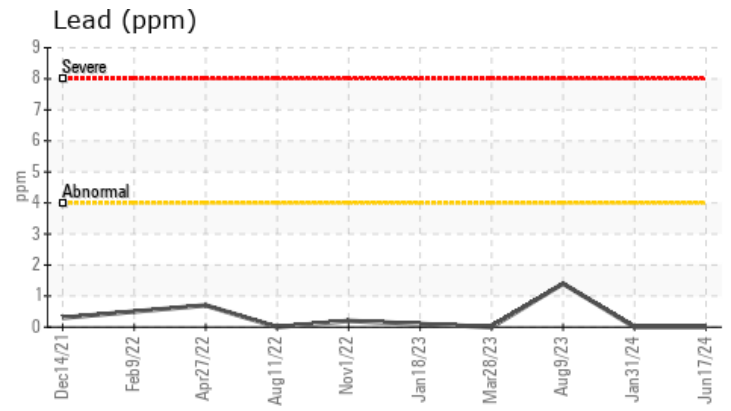
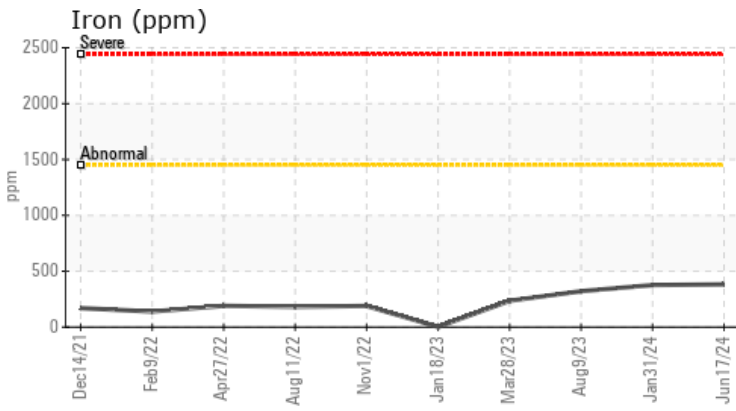
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>15	<b>3</b>	2	2
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	<1	2
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

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

Sodium	ppm	ASTM D5185m		<b>6</b>	5	6
Boron	ppm	ASTM D5185m	400	<b>52</b>	63	38
Barium	ppm	ASTM D5185m	200	<b>8</b>	9	4
Molybdenum	ppm	ASTM D5185m	12	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>4</b>	4	3
Magnesium	ppm	ASTM D5185m	12	<b>2</b>	2	1
Calcium	ppm	ASTM D5185m	150	<b>40</b>	39	36
Phosphorus	ppm	ASTM D5185m	1650	<b>2393</b>	2218	2282
Zinc	ppm	ASTM D5185m	125	<b>66</b>	58	46
Sulfur	ppm	ASTM D5185m	22500	<b>30967</b>	24036	25056



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LH0211713  
**Lab Number** : 06218973  
**Unique Number** : 11097170  
**Test Package** : MOBCE

**AHLSTROM-MUNKSJO NA SPECIALTY**  
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 US 54130  
 Contact: JOE SEITZ  
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 T:  
 F:

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)