



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR LH50M 1216-109092**  
Component  
**Rear Right Wheel Hub**  
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>LHMC149918</b>	LHMC149677	LHMC149911
Sample Date		Client Info		<b>15 May 2024</b>	13 Apr 2023	11 Oct 2022
Machine Age	hrs	Client Info		<b>16447</b>	14565	12880
Oil Age	hrs	Client Info		<b>0</b>	522	10355
Filter Age	hrs	Client Info		<b>0</b>	522	0
Oil Changed		Client Info		<b>Not Changed</b>	Changed	N/A
Filter Changed		Client Info		<b>Not Changed</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>325	<b>130</b>	91	93
Chromium	ppm	ASTM D5185m	>3	<b>2</b>	0	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>2</b>	1	2
Lead	ppm	ASTM D5185m	>4	<b>1</b>	0	<1
Copper	ppm	ASTM D5185m	>75	<b>63</b>	44	47
Tin	ppm	ASTM D5185m	>3	<b>1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

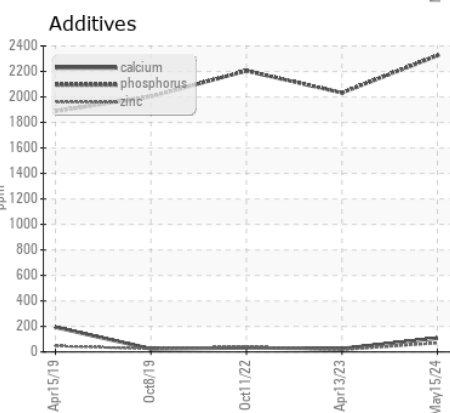
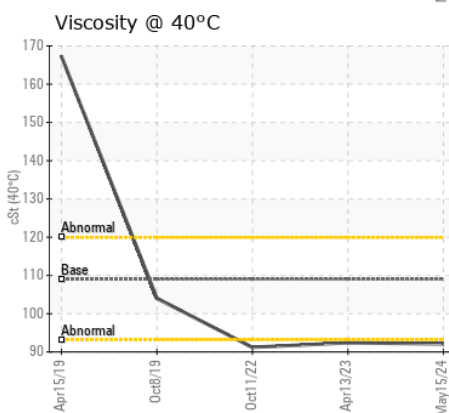
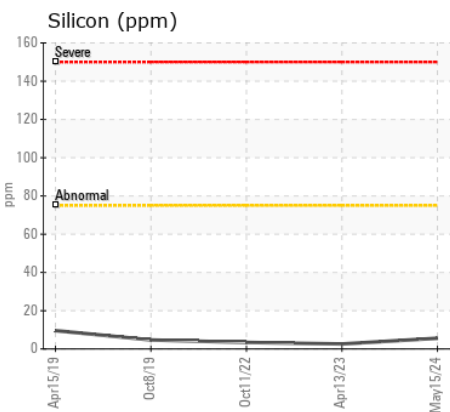
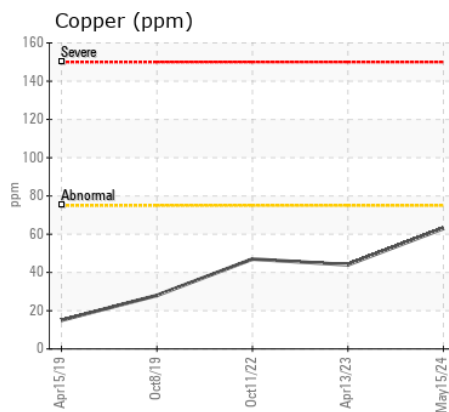
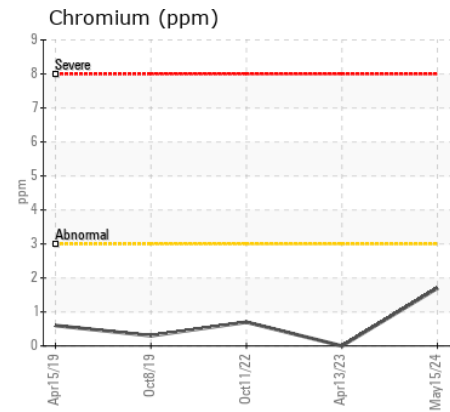
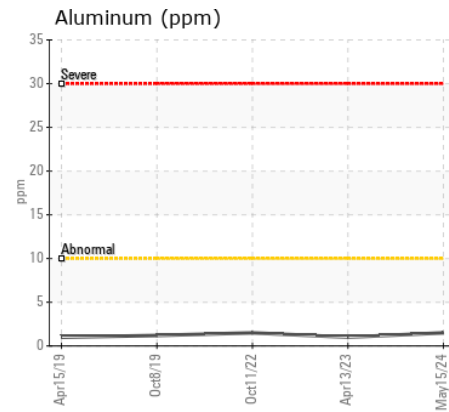
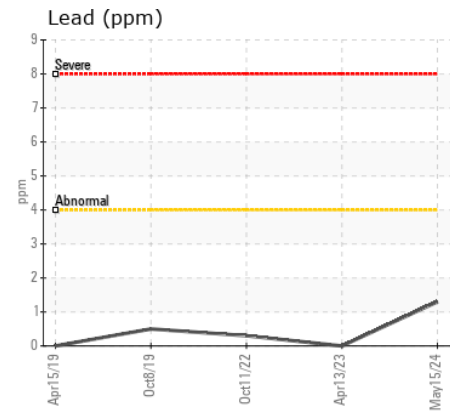
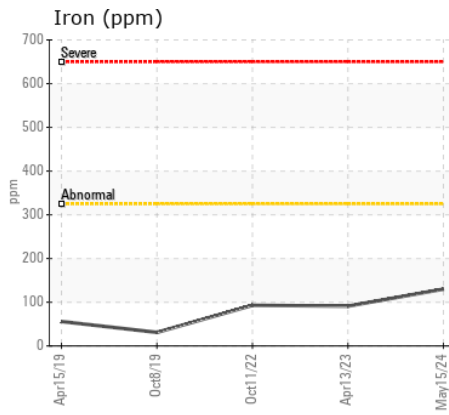
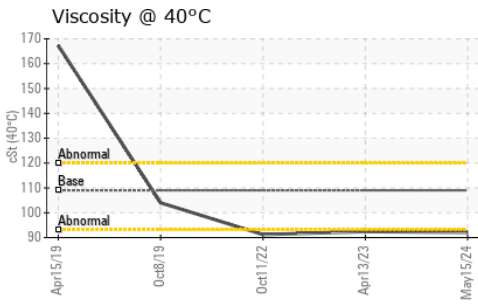
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>6</b>	3	3
Potassium	ppm	ASTM D5185m	>20	<b>2</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

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

Sodium	ppm	ASTM D5185m		<b>3</b>	3	3
Boron	ppm	ASTM D5185m	400	<b>352</b>	302	297
Barium	ppm	ASTM D5185m	200	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	12	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m		<b>3</b>	2	2
Magnesium	ppm	ASTM D5185m	12	<b>1</b>	0	<1
Calcium	ppm	ASTM D5185m	150	<b>108</b>	26	32
Phosphorus	ppm	ASTM D5185m	1650	<b>2325</b>	2032	2205
Zinc	ppm	ASTM D5185m	125	<b>70</b>	16	41
Sulfur	ppm	ASTM D5185m	22500	<b>29916</b>	25056	29300
Visc @ 40°C	cSt	ASTM D445	109	<b>92.1</b>	92.4	91.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LHMC149918  
**Lab Number** : 06186947  
**Unique Number** : 11043699  
**Test Package** : MOB 1  
**Received** : 21 May 2024  
**Tested** : 23 May 2024  
**Diagnosed** : 23 May 2024 - Don Baldrige

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