



# LIEBHERR

## OIL ANALYSIS REPORT

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



Area  
**(336343)**  
Machine Id  
**LIEBHERR LH50M 124905-1216**  
Component  
**Front Right Wheel Hub**  
Fluid  
**GEAR OIL SAE 75W90 (--- GAL)**

### RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.  
Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0290553</b>	LH0182509	LH0182495
Sample Date		Client Info		<b>27 Jun 2024</b>	21 Jul 2021	29 Apr 2021
Machine Age	hrs	Client Info		<b>22074</b>	0	4100
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>	N/A	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	None
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>325	<b>47</b>	67	170
Chromium	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	1	<1
Aluminum	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>75	<b>3</b>	6	10
Tin	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
White Metal	scalar	Visual*	NONE	<b>VLITE</b>	VLITE	LTMOD
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

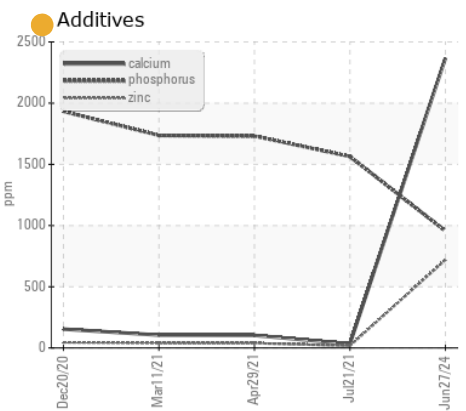
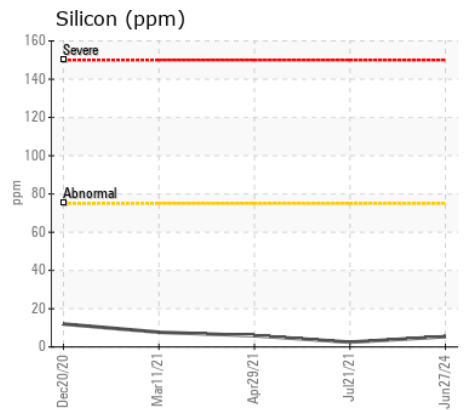
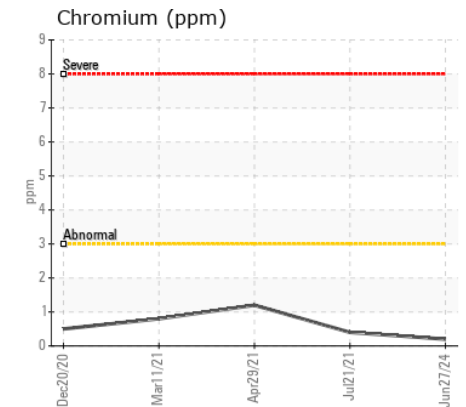
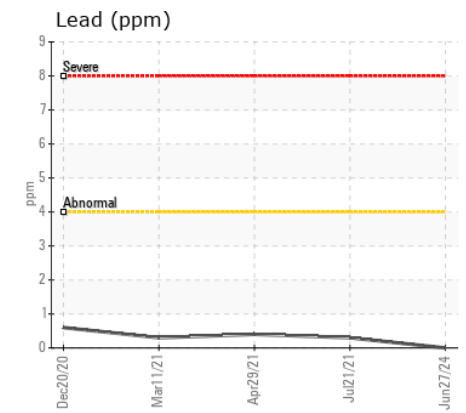
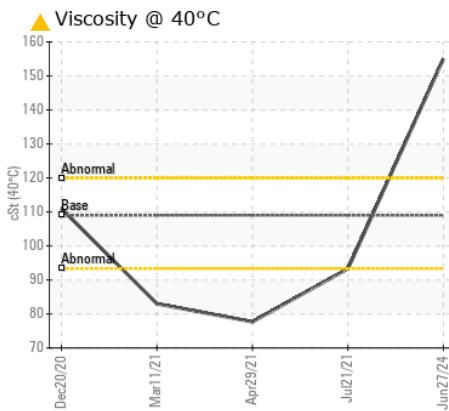
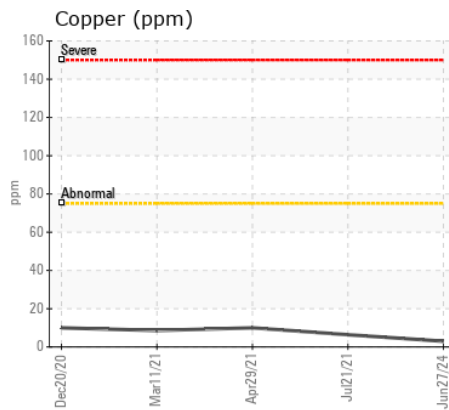
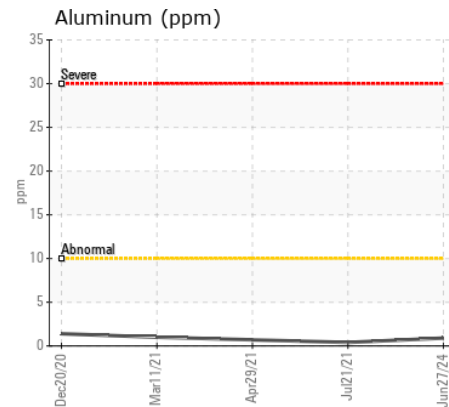
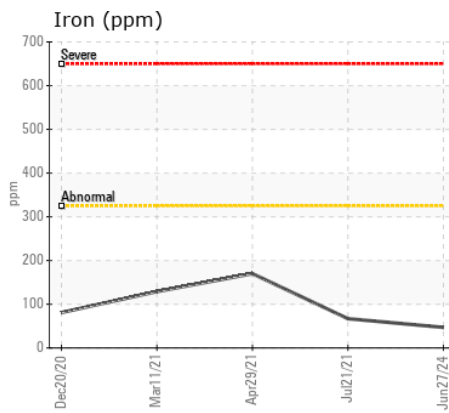
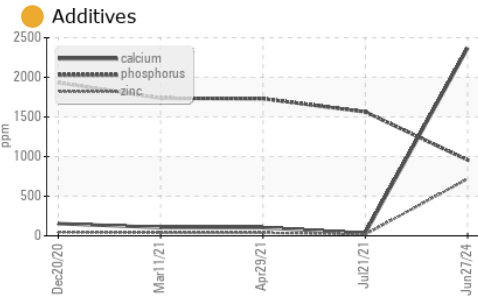
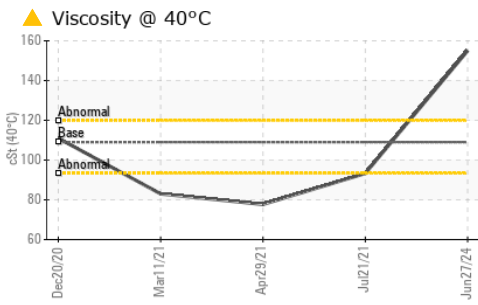
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>75	<b>5</b>	2	6
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	2	<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>	VLITE	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

Viscosity of sample indicates oil is within SAE 50 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	5	7
Boron	ppm	ASTM D5185(m)	400	<b>82</b>	187	6
Barium	ppm	ASTM D5185(m)	200	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	12	<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	1	2
Magnesium	ppm	ASTM D5185(m)	12	<b>5</b>	<1	<1
Calcium	ppm	ASTM D5185(m)	150	<b>2367</b>	33	103
Phosphorus	ppm	ASTM D5185(m)	1650	<b>956</b>	1564	1731
Zinc	ppm	ASTM D5185(m)	125	<b>718</b>	17	39
Sulfur	ppm	ASTM D5185(m)	22500	<b>8596</b>	25220	29713
Visc @ 40°C	cSt	ASTM D7279(m)	109	<b>155</b>	93.3	77.7



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0290553  
**Lab Number** : 02645553  
**Unique Number** : 5803092  
**Test Package** : MOB 1  
**Received** : 04 Jul 2024  
**Tested** : 04 Jul 2024  
**Diagnosed** : 05 Jul 2024 - Kevin Marson

**CANFOR**  
 101-161 E 4TH AVE  
 VANCOUVER, BC  
 CA V5T 3C1  
 Contact: Service Manager

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.

T:  
F: