



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR LH50 083207-1203**  
Component  
**Front Left Wheel Hub**  
Fluid  
**KLONDIKE FULL SYNTHETIC 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>LH0270343</b>	LH0260597	LH0213809
Sample Date		Client Info		<b>13 Mar 2024</b>	08 Jul 2023	15 Jan 2023
Machine Age	hrs	Client Info		<b>19953</b>	18266	17068
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>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>325	<b>33</b>	23	31
Chromium	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>10	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>4	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m)	>75	<b>6</b>	4	4
Tin	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>VLITE</b>	VLITE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

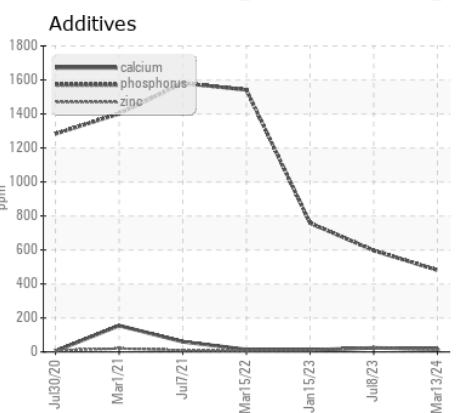
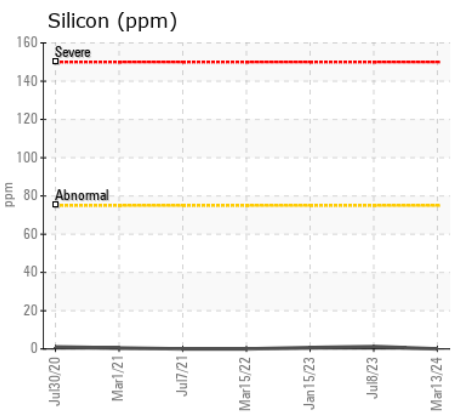
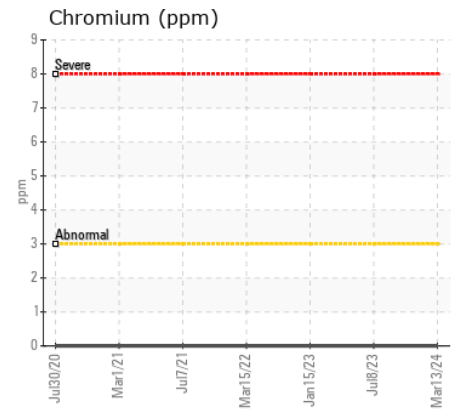
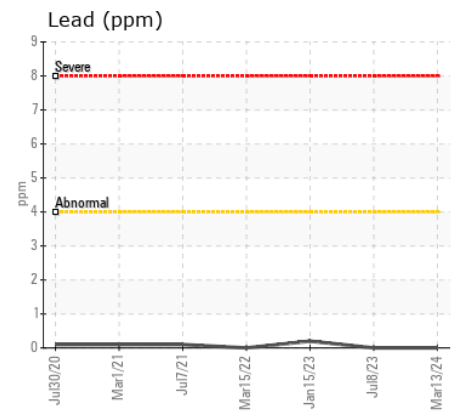
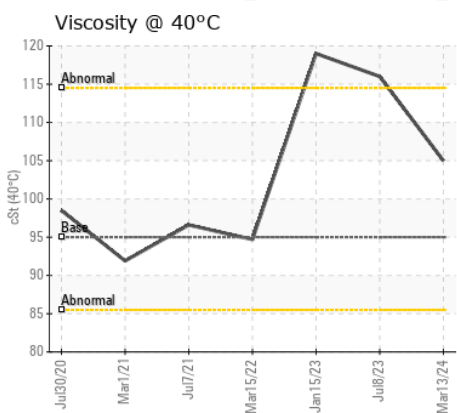
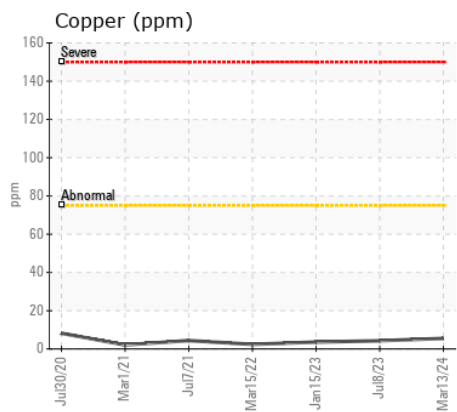
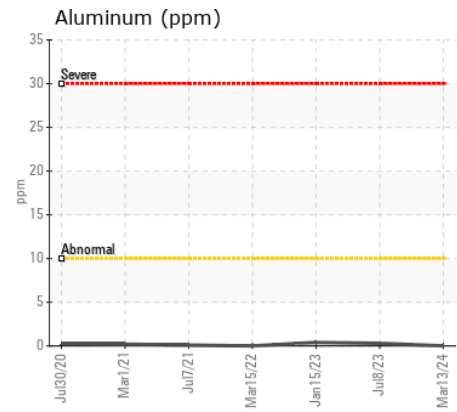
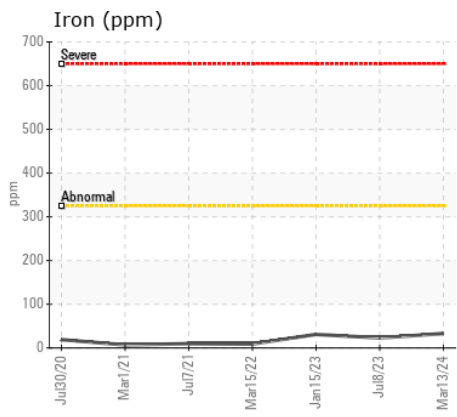
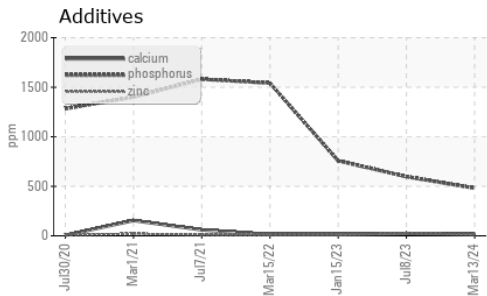
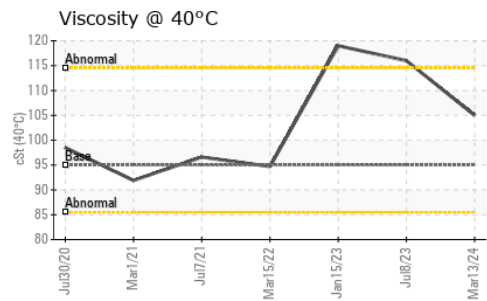
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>75	<b>0</b>	1	<1
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<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

Additive levels indicate the addition of a different brand, or type of oil.  
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	2	2
Boron	ppm	ASTM D5185(m)		<b>26</b>	53	96
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)		<b>2</b>	1	2
Calcium	ppm	ASTM D5185(m)		<b>17</b>	24	12
Phosphorus	ppm	ASTM D5185(m)		<b>481</b>	597	758
Zinc	ppm	ASTM D5185(m)		<b>13</b>	23	10
Sulfur	ppm	ASTM D5185(m)		<b>15069</b>	16293	18671
Visc @ 40°C	cSt	ASTM D7279(m)	95	<b>105</b>	116	119



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0270343  
**Lab Number** : 02625023  
**Unique Number** : 5750142  
**Test Package** : MOB 1  
**Received** : 27 Mar 2024  
**Tested** : 27 Mar 2024  
**Diagnosed** : 27 Mar 2024 - Wes Davis

**ABC RECYCLING**  
 8081 MEADOW AVE.  
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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.