



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR L556 059655-1332**  
Component  
**Front Right Wheel Hub**  
Fluid  
**LIEBHERR GEAR BASIC 90 LS (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH</b>	LH0180820	LH0180807
Sample Date		Client Info		<b>28 Feb 2024</b>	10 Dec 2021	10 Sep 2021
Machine Age	hrs	Client Info		<b>250</b>	5000	4019
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>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	None
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>500	<b>21</b>	58	53
Chromium	ppm	ASTM D5185(m)	>8	<b>0</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	<1
Aluminum	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	1	<1
Copper	ppm	ASTM D5185(m)	>50	<b>8</b>	30	38
Tin	ppm	ASTM D5185(m)		<b>&lt;1</b>	2	2
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>LIGHT</b>	VLITE	VLITE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	VLITE

### CONTAMINATION

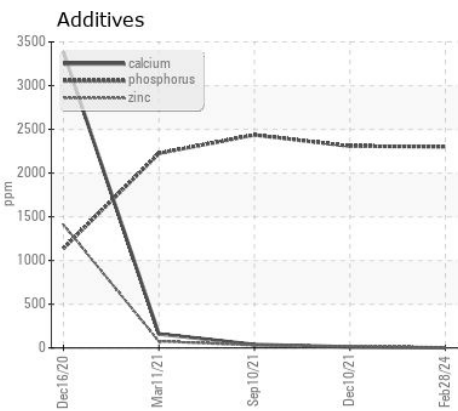
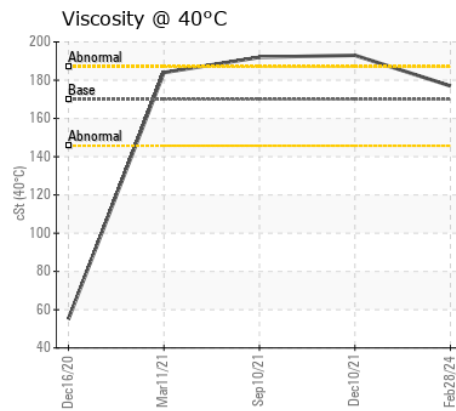
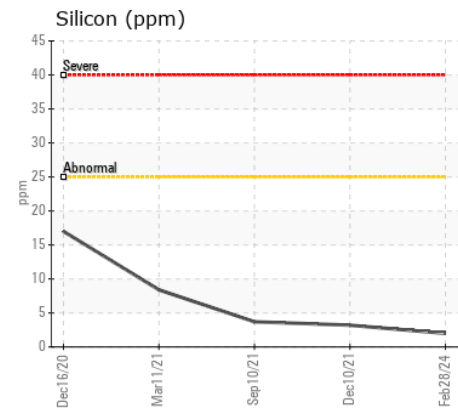
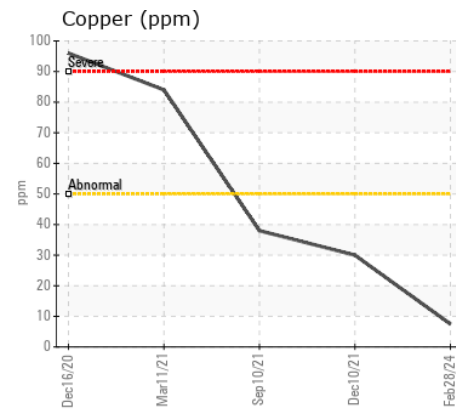
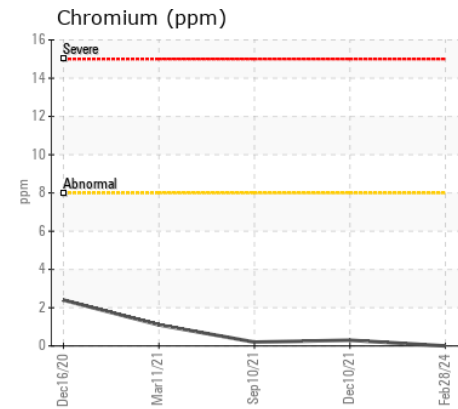
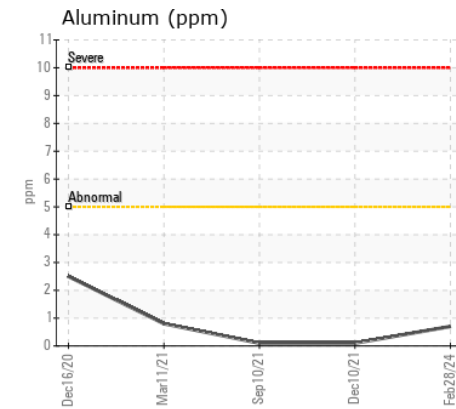
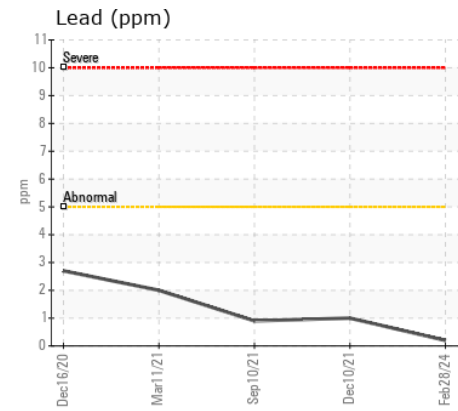
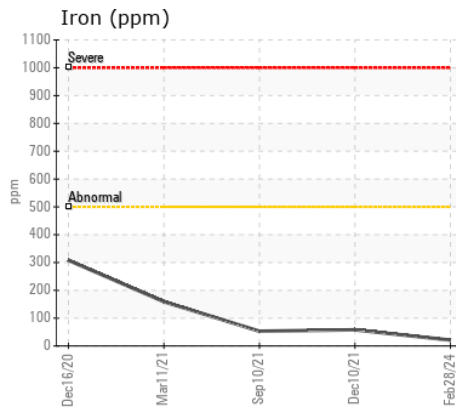
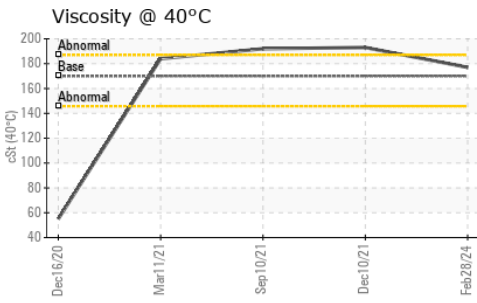
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	3	4
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>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	VLITE	VLITE
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 D5185(m)		<b>&lt;1</b>	2	3
Boron	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	4
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	3	2
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	2	3
Magnesium	ppm	ASTM D5185(m)	<1	<b>&lt;1</b>	3	<1
Calcium	ppm	ASTM D5185(m)	<1	<b>2</b>	12	39
Phosphorus	ppm	ASTM D5185(m)	2143	<b>2302</b>	2308	2436
Zinc	ppm	ASTM D5185(m)	<1	<b>5</b>	19	30
Sulfur	ppm	ASTM D5185(m)	23468	<b>25336</b>	23837	24660
Visc @ 40°C	cSt	ASTM D7279(m)	170	<b>177</b>	193	192



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH  
**Lab Number** : 02619036  
**Unique Number** : 5736146  
**Test Package** : MOB 1

**PRODUITS FORESTIERS D.G. LTEE**  
 313 RANG ST-JOSEPH  
 STE-AURELIE, QC  
 CA G0M 1M0  
 Contact: Roger .

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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