



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR L556 059655-1332**  
Component  
**Rear Differential**  
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>	LH0180814	LH0180801
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>	None	None
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>1000	<b>25</b>	53	52
Chromium	ppm	ASTM D5185(m)	>10	<b>0</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>	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	<b>2</b>	0	<1
Lead	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>100	<b>6</b>	14	23
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	VLITE	VLITE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

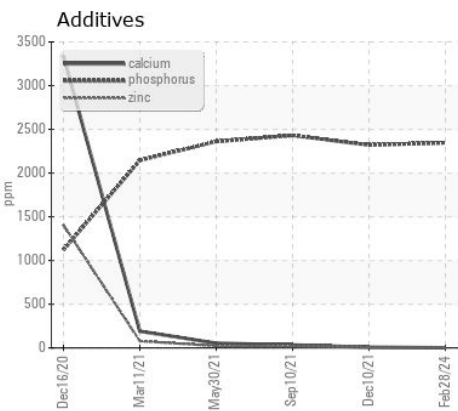
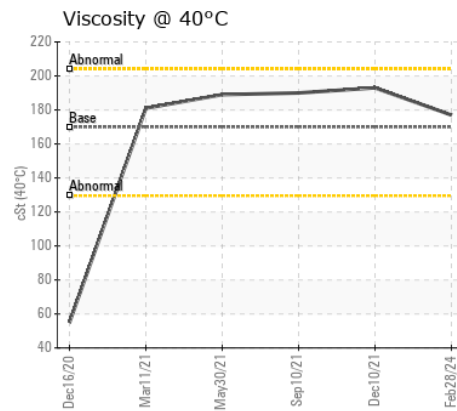
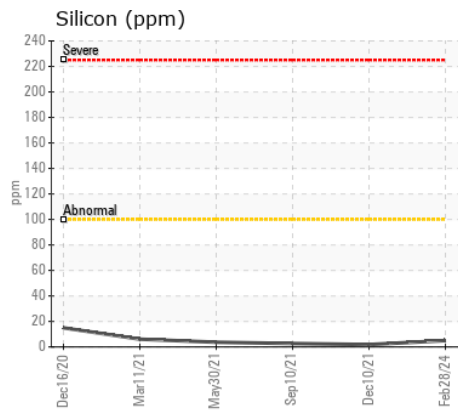
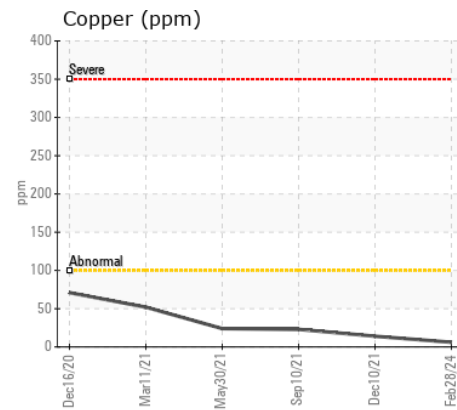
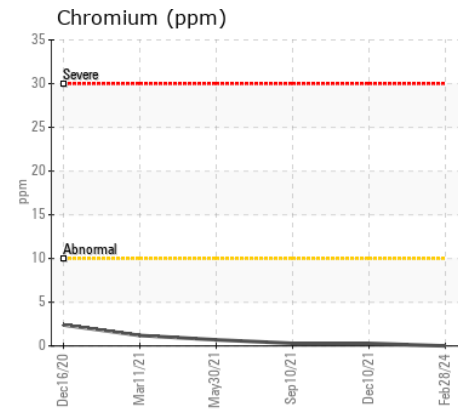
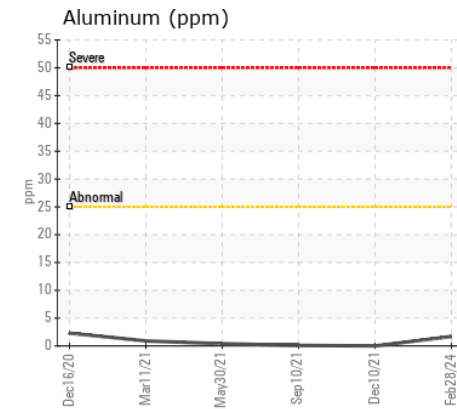
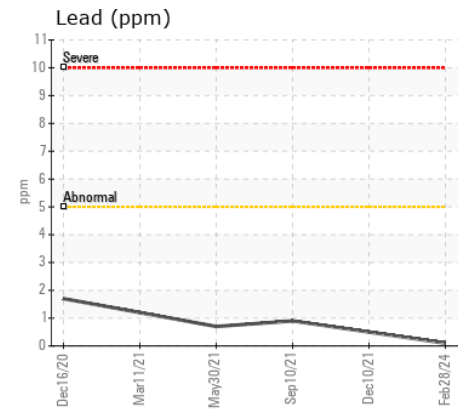
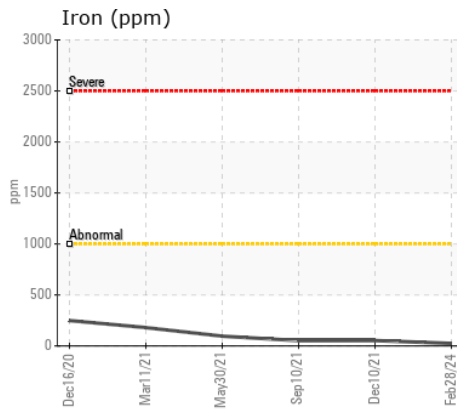
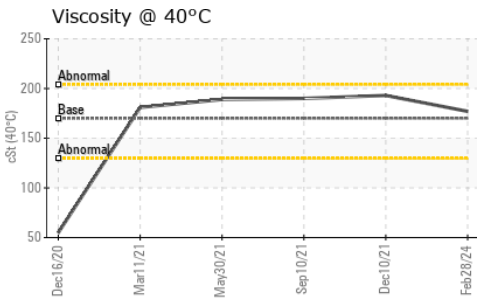
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>100	<b>5</b>	2	3
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	<1
Water		WC Method	>.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>LIGHT</b>	VLITE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>.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>1</b>	2	2
Boron	ppm	ASTM D5185(m)	0	<b>0</b>	<1	3
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	3	3
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	2	2
Magnesium	ppm	ASTM D5185(m)	<1	<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185(m)	<1	<b>2</b>	8	34
Phosphorus	ppm	ASTM D5185(m)	2143	<b>2347</b>	2321	2431
Zinc	ppm	ASTM D5185(m)	<1	<b>4</b>	9	18
Sulfur	ppm	ASTM D5185(m)	23468	<b>25758</b>	24931	24405
Visc @ 40°C	cSt	ASTM D7279(m)	170	<b>177</b>	193	190



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH  
**Lab Number** : 02619037  
**Unique Number** : 5736147  
**Test Package** : MOB 1

**Received** : 29 Feb 2024  
**Tested** : 29 Feb 2024  
**Diagnosed** : 29 Feb 2024 - Wes Davis

**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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