



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR L586 065499-1761**  
Component  
**Rear Differential**  
Fluid  
**LIEBHERR GEAR BASIC 90 LS (60 LTR)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0268335</b>	LH0258503	LH0229219
Sample Date		Client Info		<b>07 Feb 2024</b>	24 Aug 2023	24 Mar 2023
Machine Age	hrs	Client Info		<b>6246</b>	5023	3987
Oil Age	hrs	Client Info		<b>2000</b>	1036	1970
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Filtered	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 D5185m	>1500	<b>39</b>	48	41
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>5	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m	>5	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>200	<b>33</b>	49	62
Tin	ppm	ASTM D5185m	>10	<b>2</b>	2	1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

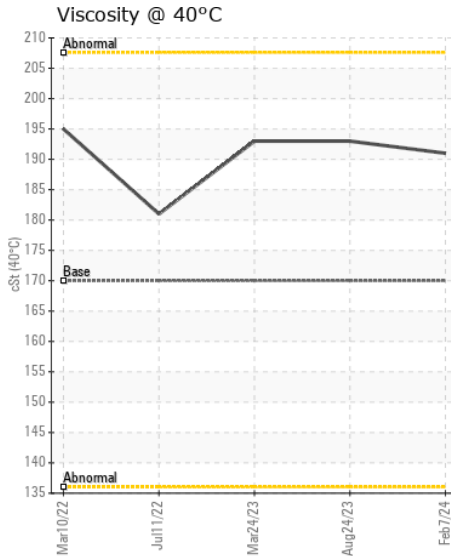
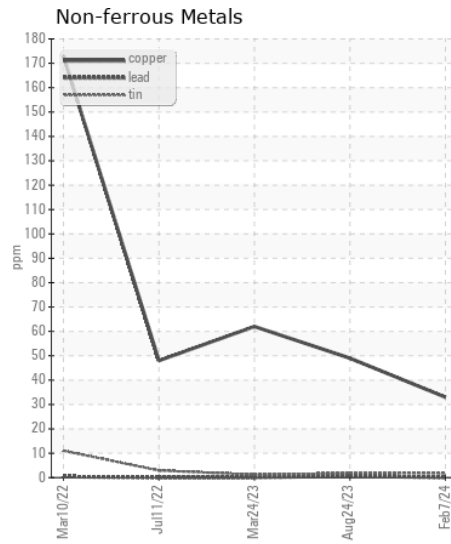
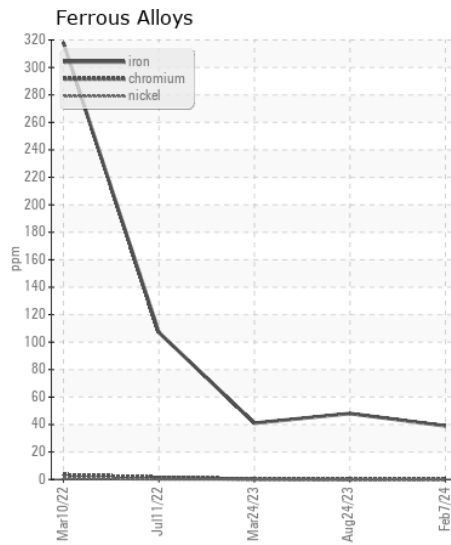
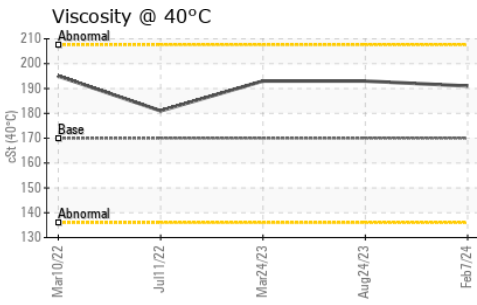
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>60	<b>3</b>	2	1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	0
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	LIGHT
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	>.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>&lt;1</b>	2	1
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	0	<b>2</b>	3	3
Magnesium	ppm	ASTM D5185m	<1	<b>0</b>	0	3
Calcium	ppm	ASTM D5185m	<1	<b>10</b>	30	17
Phosphorus	ppm	ASTM D5185m	2143	<b>2289</b>	2078	2291
Zinc	ppm	ASTM D5185m	<1	<b>26</b>	55	54
Sulfur	ppm	ASTM D5185m	23468	<b>25221</b>	25056	30037
Visc @ 40°C	cSt	ASTM D445	170	<b>191</b>	193	193



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LH0268335  
**Lab Number** : 06086424  
**Unique Number** : 10873869  
**Test Package** : CONST  
**Received** : 12 Feb 2024  
**Tested** : 13 Feb 2024  
**Diagnosed** : 13 Feb 2024 - Wes Davis

**JR VINAGRO**  
 2208 PLAINFIELD PIKE  
 JOHNSTON, RI  
 US 02919  
 Contact: Service Manager

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)

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F: