



# OIL ANALYSIS REPORT

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

Area  
**AMR-12th Street**  
 Machine Id  
**484145 116360**  
 Component  
**Rear Left 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>DJJ0013869</b>	DJJ0018353	DJJ0019184
Sample Date		Client Info		<b>02 Jan 2024</b>	21 Sep 2023	01 Jun 2023
Machine Age	hrs	Client Info		<b>9493</b>	9001	8489
Oil Age	hrs	Client Info		<b>0</b>	0	500
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 D5185m	>500	<b>5</b>	8	2
Chromium	ppm	ASTM D5185m	>8	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>5	<b>2</b>	0	0
Lead	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>2</b>	6	0
Tin	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

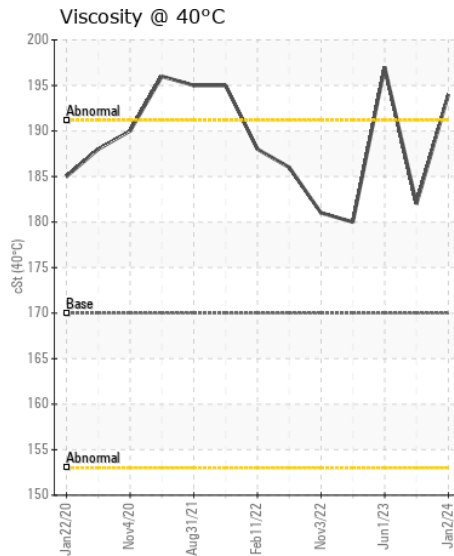
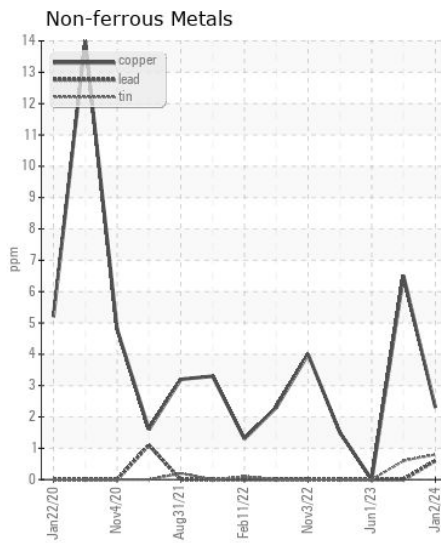
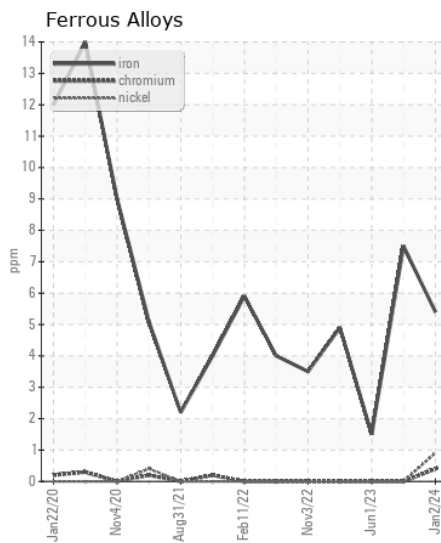
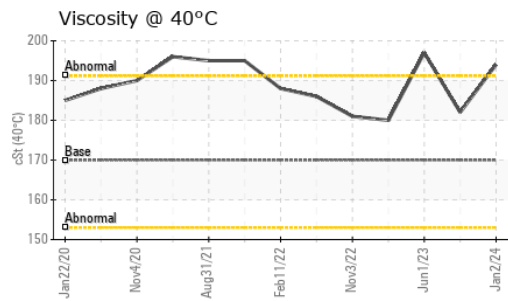
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>2</b>	<1	1
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	5	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>	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

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>1</b>	5	0
Boron	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	1
Molybdenum	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	<1	<b>&lt;1</b>	4	0
Calcium	ppm	ASTM D5185m	<1	<b>10</b>	19	17
Phosphorus	ppm	ASTM D5185m	2143	<b>3382</b>	2335	2313
Zinc	ppm	ASTM D5185m	<1	<b>0</b>	8	9
Sulfur	ppm	ASTM D5185m	23468	<b>50180</b>	29216	27965
Visc @ 40°C	cSt	ASTM D445	170	<b>194</b>	182	197



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DJJ0013869 **Received** : 08 Jan 2024  
**Lab Number** : 06054404 **Diagnosed** : 10 Jan 2024  
**Unique Number** : 10820353 **Diagnostician** : Jonathan Hester  
**Test Package** : CONST

**ADVANTAGE METALS RECYCLING - 12 STREET**  
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 US 66105  
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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)