



# OIL ANALYSIS REPORT

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

Area  
**AMR-Manchester**  
 Machine Id  
**646242 144845**  
 Component  
**Right Final Drive**  
 Fluid  
**LIEBHERR GEAR BASIC 90 LS (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

## WEAR

All component wear rates are normal.

## CONTAMINATION

There is no indication of any contamination in the oil.

## FLUID CONDITION

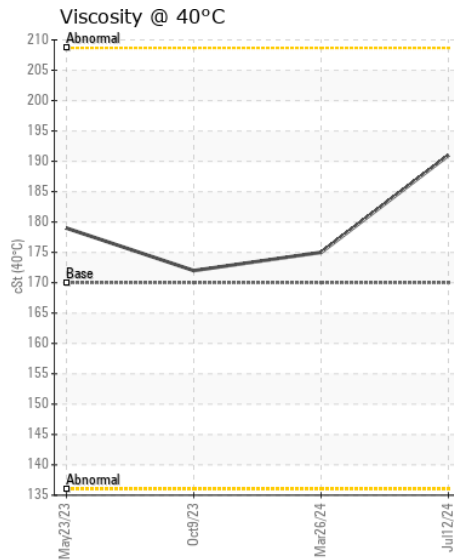
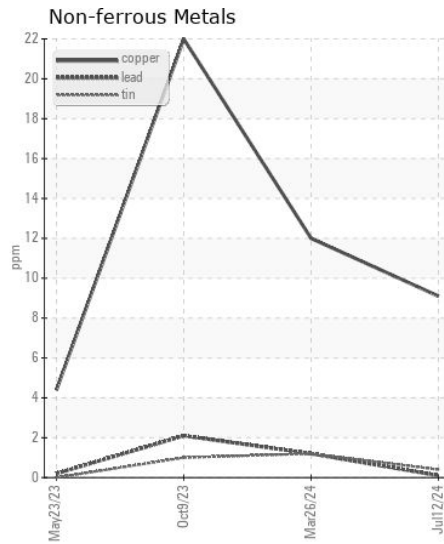
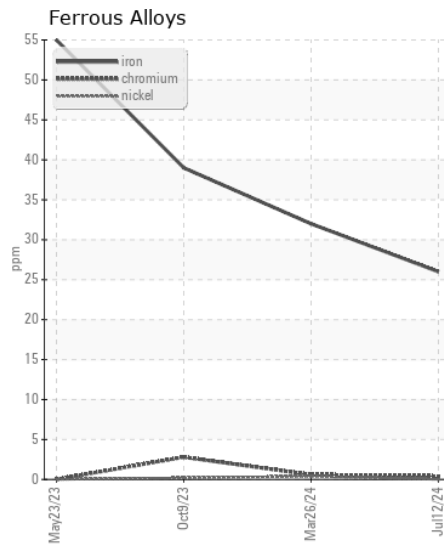
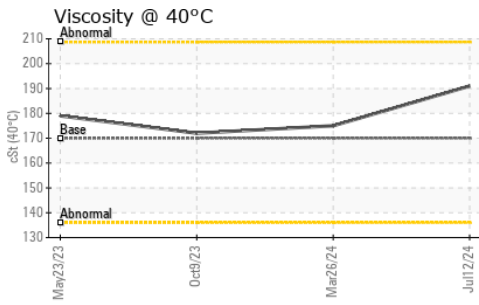
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>DJJ0024840</b>	DJJ0013967	DJJ0003529
Sample Date		Client Info		<b>12 Jul 2024</b>	26 Mar 2024	09 Oct 2023
Machine Age	hrs	Client Info		<b>2131</b>	1529	991
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

Iron	ppm	ASTM D5185m	>500	<b>26</b>	32	39
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	3
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	2	<1
Lead	ppm	ASTM D5185m	>25	<b>&lt;1</b>	1	2
Copper	ppm	ASTM D5185m	>50	<b>9</b>	12	22
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	1	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

Silicon	ppm	ASTM D5185m	>75	<b>2</b>	3	3
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	1	2
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

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	2	4
Boron	ppm	ASTM D5185m	0	<b>2</b>	8	2
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<1	<b>&lt;1</b>	1	1
Calcium	ppm	ASTM D5185m	<1	<b>0</b>	127	47
Phosphorus	ppm	ASTM D5185m	2143	<b>2273</b>	2389	2206
Zinc	ppm	ASTM D5185m	<1	<b>5</b>	60	22
Sulfur	ppm	ASTM D5185m	23468	<b>25806</b>	30310	29565
Visc @ 40°C	cSt	ASTM D445	170	<b>191</b>	175	172



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DJJ0024840  
**Lab Number** : 06238622  
**Unique Number** : 11127456  
**Test Package** : CONST

**Received** : 16 Jul 2024  
**Tested** : 17 Jul 2024  
**Diagnosed** : 17 Jul 2024 - Wes Davis

**ADVANTAGE METALS RECYCLING - MANCHESTER**  
 3005 MANCHESTER TRAFFICWAY  
 KANSAS CITY, MO  
 US 64129

Contact: STEVE BROWN  
 steve.brown@advantagerecycling.com

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)

T: (816)922-5100  
 F: (816)861-7670