



# OIL ANALYSIS REPORT

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



Area  
**AMR-12th Street**  
Machine Id  
**339324 LIEBHERR LH60M 1204-86896**  
Component  
**Rear Differential**  
Fluid  
**LIEBHERR GEAR BASIC 90 LS (11 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>DJJ0013948</b>	DJJ0017132	DJJ0013874
Sample Date		Client Info		<b>11 Jun 2024</b>	26 Dec 2023	15 Sep 2023
Machine Age	hrs	Client Info		<b>15501</b>	15052	14489
Oil Age	hrs	Client Info		<b>500</b>	1000	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Changed	Not Changd
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	>150	<b>6</b>	4	4
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</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>0</b>	0	0
Copper	ppm	ASTM D5185m	>125	<b>4</b>	7	6
Tin	ppm	ASTM D5185m	>5	<b>0</b>	0	<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

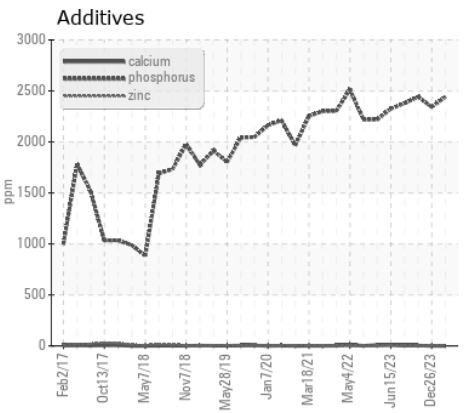
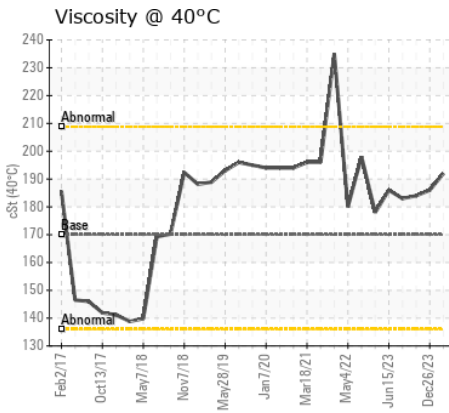
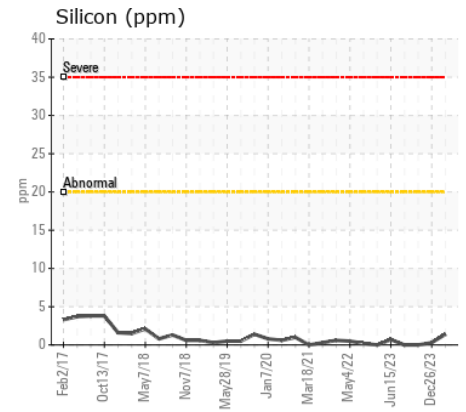
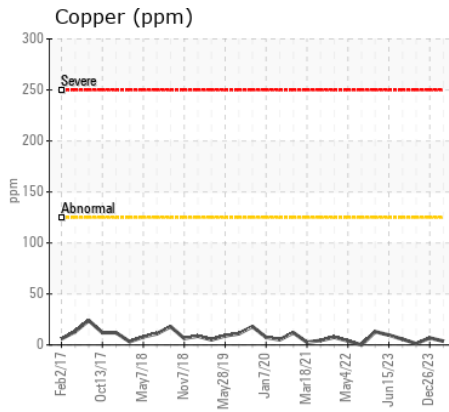
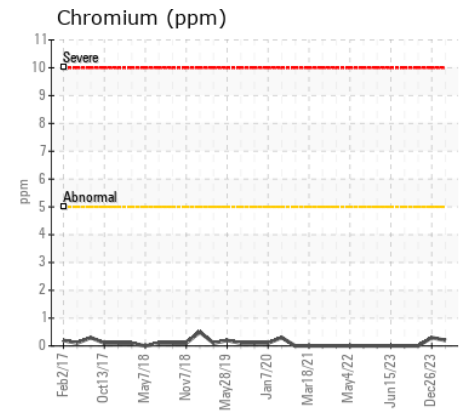
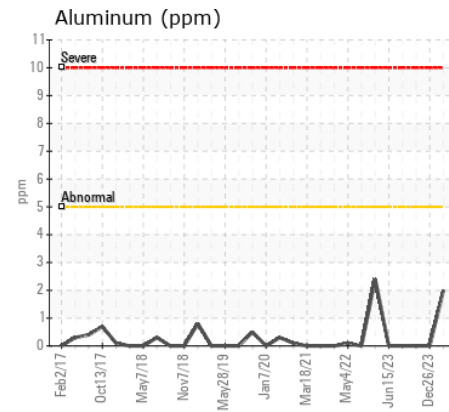
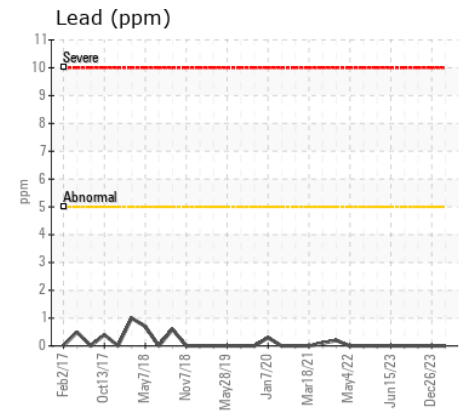
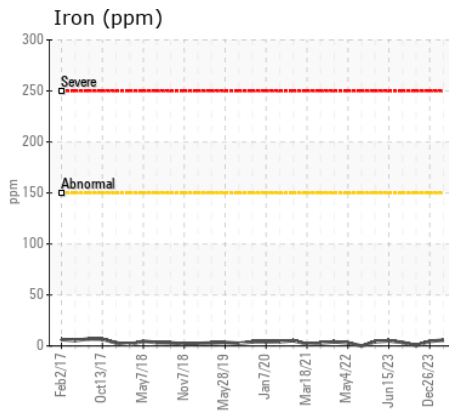
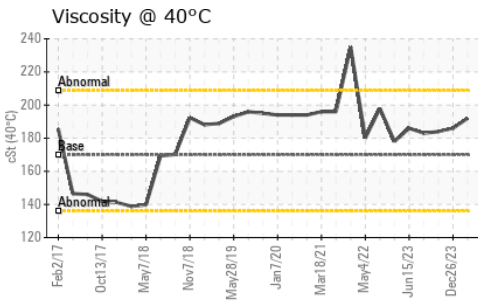
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>1</b>	<1	0
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	5
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</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>0</b>	<1	4
Boron	ppm	ASTM D5185m	0	<b>&lt;1</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>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	<1	<b>&lt;1</b>	0	4
Calcium	ppm	ASTM D5185m	<1	<b>0</b>	0	4
Phosphorus	ppm	ASTM D5185m	2143	<b>2442</b>	2342	2442
Zinc	ppm	ASTM D5185m	<1	<b>5</b>	0	2
Sulfur	ppm	ASTM D5185m	23468	<b>26407</b>	28316	27810
Visc @ 40°C	cSt	ASTM D445	170	<b>192</b>	186	184



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DJJ0013948  
**Lab Number** : 06216159  
**Unique Number** : 11089023  
**Test Package** : MOBCE

**Received** : 20 Jun 2024  
**Tested** : 21 Jun 2024  
**Diagnosed** : 21 Jun 2024 - Wes Davis

**ADVANTAGE METALS RECYCLING - 12 STREET**  
 1153 S. 12TH STREET  
 KANSAS CITY, KS  
 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)