



# OIL ANALYSIS REPORT

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



Area  
**AMR-12th Street [FORT SCOTT]**  
Machine Id  
**23636 LIEBHERR R924 025202-1066**  
Component  
**Left Final Drive**  
Fluid  
**LIEBHERR GEAR BASIC 90 LS (2 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>DJJ0017220</b>	DJJ0017273	DJJ0017261
Sample Date		Client Info		<b>20 May 2024</b>	06 Nov 2023	27 Mar 2023
Machine Age	hrs	Client Info		<b>12691</b>	12142	11581
Oil Age	hrs	Client Info		<b>0</b>	500	1000
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	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	>1525	<b>220</b>	74	123
Chromium	ppm	ASTM D5185m	>25	<b>8</b>	4	11
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m	>8	<b>2</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>90	<b>42</b>	7	16
Lead	ppm	ASTM D5185m	>8	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>85	<b>5</b>	3	4
Tin	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

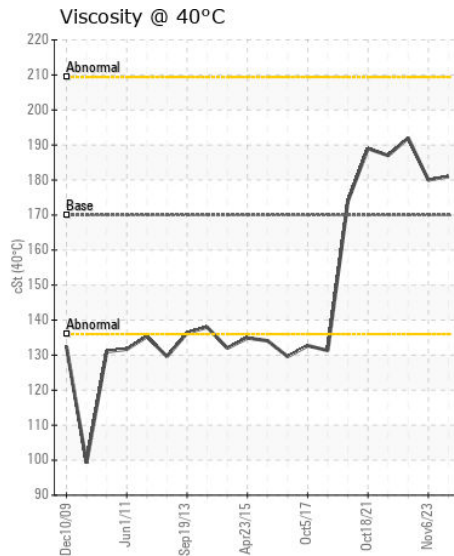
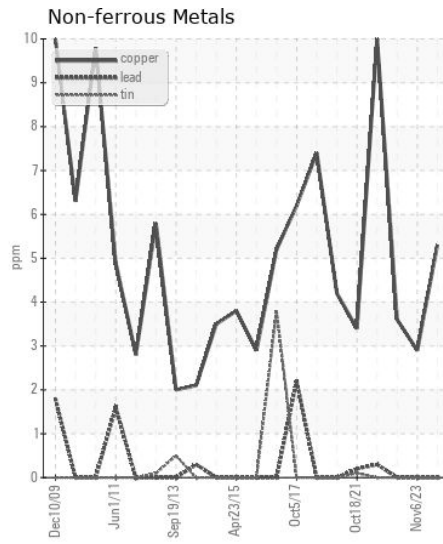
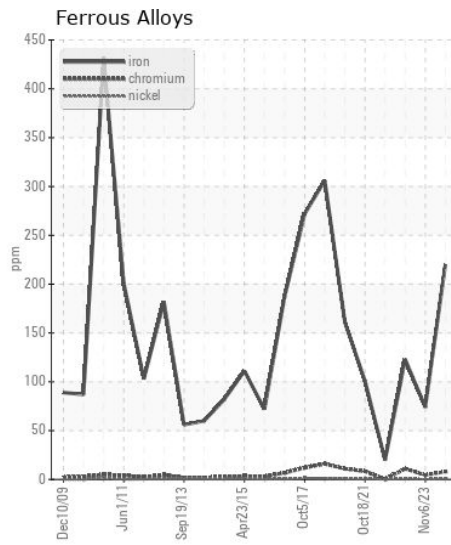
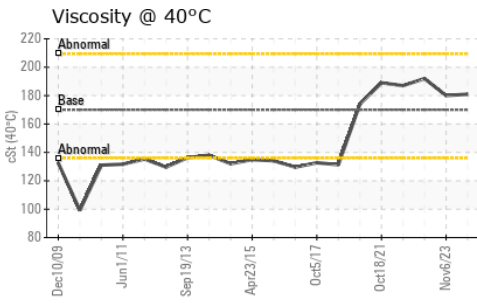
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>460	<b>149</b>	29	62
Potassium	ppm	ASTM D5185m	>20	<b>9</b>	2	4
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>5</b>	2	2
Boron	ppm	ASTM D5185m	0	<b>18</b>	18	30
Barium	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>2</b>	<1	0
Manganese	ppm	ASTM D5185m	0	<b>3</b>	1	2
Magnesium	ppm	ASTM D5185m	<1	<b>8</b>	0	5
Calcium	ppm	ASTM D5185m	<1	<b>210</b>	32	120
Phosphorus	ppm	ASTM D5185m	2143	<b>2438</b>	2318	2306
Zinc	ppm	ASTM D5185m	<1	<b>13</b>	0	16
Sulfur	ppm	ASTM D5185m	23468	<b>37012</b>	33762	25056
Visc @ 40°C	cSt	ASTM D445	170	<b>181</b>	180	192



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DJJ0017220  
**Lab Number** : 06190829  
**Unique Number** : 11047581  
**Test Package** : CONST

**Received** : 24 May 2024  
**Tested** : 28 May 2024  
**Diagnosed** : 28 May 2024 - Wes Davis

**ADVANTAGE METALS RECYCLING - 12 STREET**  
 1153 S. 12TH 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)