



# OIL ANALYSIS REPORT

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



Area  
**RMR-Xenia**  
 Machine Id  
**18528 LIEBHERR R944 005448-651**  
 Component  
**Swing Drive**  
 Fluid  
**GEAR OIL SAE 80W90 (--- GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>DJJ0017796</b>	DJJ0018006	DJJ0004280
Sample Date		Client Info		<b>24 May 2024</b>	13 Mar 2023	11 Dec 2020
Machine Age	hrs	Client Info		<b>10032</b>	9577	9026
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changed</b>	Changed	Not Changed
Filter Changed		Client Info		<b>Not Changed</b>	Changed	Not Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>1800	<b>985</b>	576	113
Chromium	ppm	ASTM D5185m	>20	<b>8</b>	6	1
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185m	>8	<b>0</b>	1	0
Copper	ppm	ASTM D5185m	>500	<b>177</b>	128	29
Tin	ppm	ASTM D5185m	>20	<b>5</b>	4	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

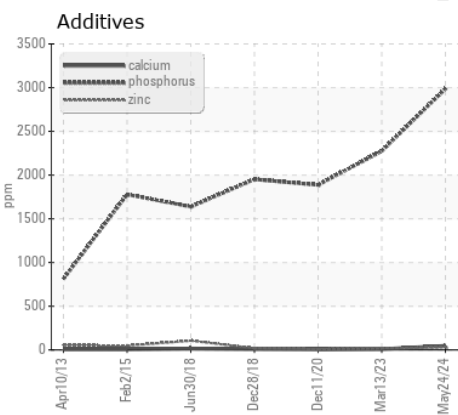
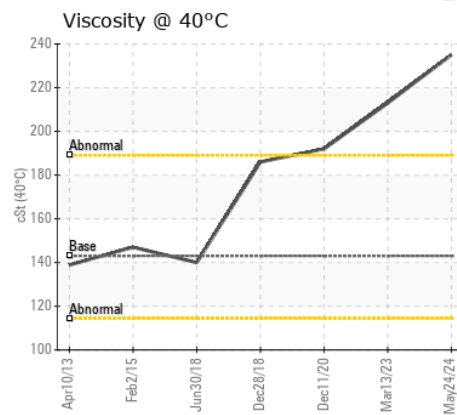
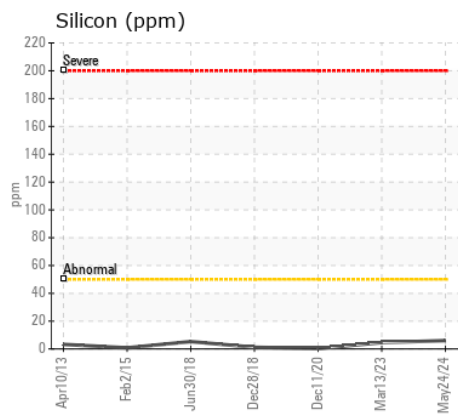
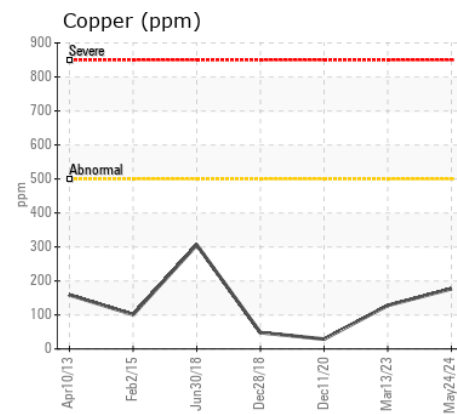
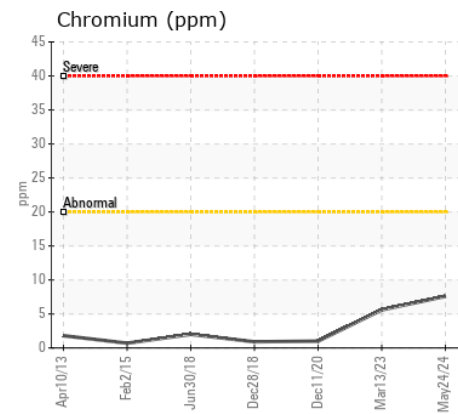
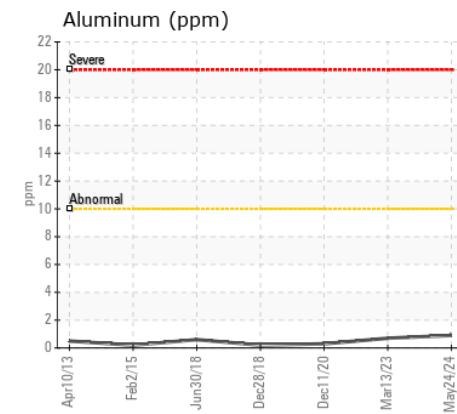
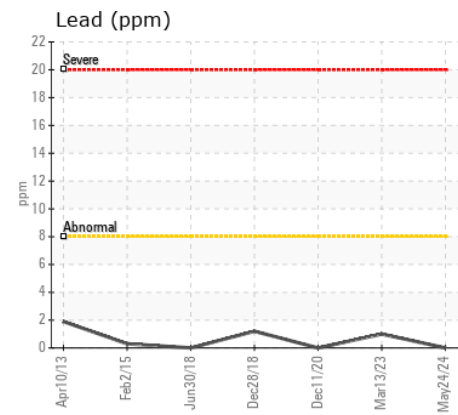
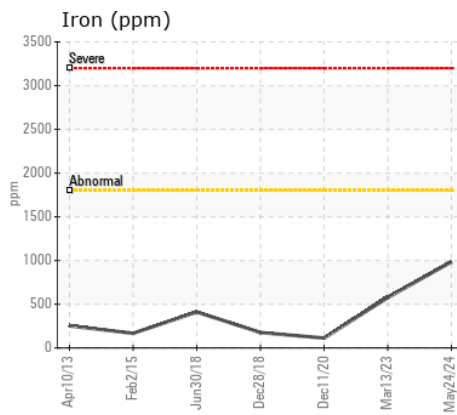
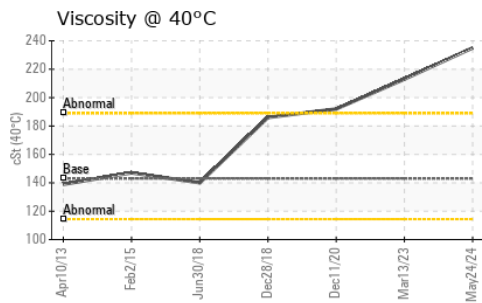
Moderate concentration of visible dirt/debris present in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>6</b>	5	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	2
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	MODER
Debris	scalar	*Visual	NONE	<b>▲ MODER</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

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

Sodium	ppm	ASTM D5185m	>170	<b>2</b>	4	2
Boron	ppm	ASTM D5185m	400	<b>3</b>	5	6
Barium	ppm	ASTM D5185m	200	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	12	<b>0</b>	<1	0
Manganese	ppm	ASTM D5185m		<b>4</b>	5	1
Magnesium	ppm	ASTM D5185m	12	<b>4</b>	8	3
Calcium	ppm	ASTM D5185m	150	<b>48</b>	10	5
Phosphorus	ppm	ASTM D5185m	1650	<b>2986</b>	2275	1887
Zinc	ppm	ASTM D5185m	125	<b>27</b>	19	8
Sulfur	ppm	ASTM D5185m	22500	<b>38768</b>	25056	21995
Visc @ 40°C	cSt	ASTM D445	143	<b>235</b>	213	192



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DJJ0017796 **Received** : 31 May 2024  
**Lab Number** : 06197135 **Tested** : 03 Jun 2024  
**Unique Number** : 11059258 **Diagnosed** : 04 Jun 2024 - Don Baldrige  
**Test Package** : MOBCE

**RIVER METALS RECYCLING - XENIA**  
 840 JASPER RD  
 XENIA, OH  
 US 45385  
 Contact: RYAN BOWDEN

Certificate L2367  
 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)