



# OIL ANALYSIS REPORT

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



Area  
**TMR-Sunshine**  
Machine Id  
**21584 LIEBHERR R934 925-14645**  
Component  
**Left Final Drive**  
Fluid  
**GEAR OIL SAE 80W90 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL SAE 80W90. Please confirm.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>DJJ0021126</b>	DJJ0021130	DJJ0008277
Sample Date		Client Info		<b>06 Feb 2024</b>	17 Oct 2023	22 Jun 2022
Machine Age	hrs	Client Info		<b>28499</b>	27965	0
Oil Age	hrs	Client Info		<b>0</b>	1000	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Chngd</b>	Changed	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>1700	<b>170</b>	691	17
Chromium	ppm	ASTM D5185m	>30	<b>3</b>	10	2
Nickel	ppm	ASTM D5185m	>8	<b>0</b>	1	0
Titanium	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	2	0
Aluminum	ppm	ASTM D5185m	>100	<b>&lt;1</b>	<1	0
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	2	<1
Copper	ppm	ASTM D5185m	>100	<b>4</b>	10	6
Tin	ppm	ASTM D5185m	>8	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

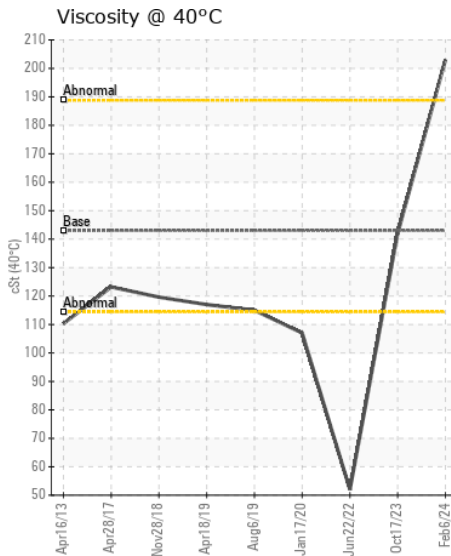
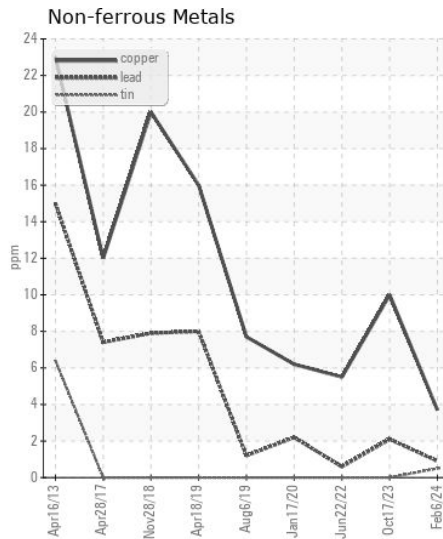
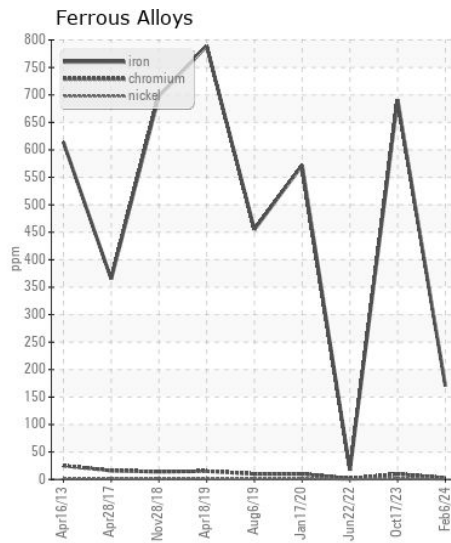
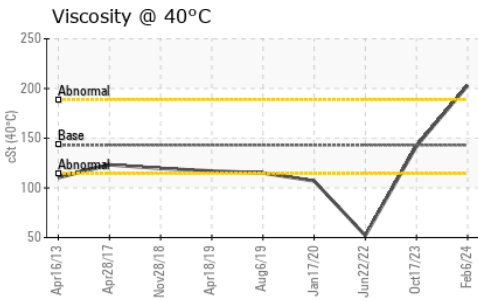
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>500	<b>4</b>	17	6
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	0
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	▲ MODER
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	>170	<b>0</b>	0	<1
Boron	ppm	ASTM D5185m	400	<b>13</b>	54	3
Barium	ppm	ASTM D5185m	200	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	12	<b>&lt;1</b>	2	5
Manganese	ppm	ASTM D5185m		<b>2</b>	6	<1
Magnesium	ppm	ASTM D5185m	12	<b>6</b>	10	▲ 33
Calcium	ppm	ASTM D5185m	150	<b>268</b>	560	▲ 2848
Phosphorus	ppm	ASTM D5185m	1650	<b>545</b>	866	978
Zinc	ppm	ASTM D5185m	125	<b>163</b>	341	▲ 1197
Sulfur	ppm	ASTM D5185m	22500	<b>17039</b>	11813	▲ 4582
Visc @ 40°C	cSt	ASTM D445	143	<b>203</b>	142	▲ 52.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DJJ0021126  
**Lab Number** : 06087789  
**Unique Number** : 10875234  
**Test Package** : CONST

**Received** : 13 Feb 2024  
**Tested** : 14 Feb 2024  
**Diagnosed** : 14 Feb 2024 - Wes Davis

**TRADEMARK METALS RECYCLING - SUNSHINE**  
 13200 CAIRO LN  
 OPA LOCKA, FL  
 US 33054  
 Contact: Service Manager

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:  
F: