



# OIL ANALYSIS REPORT

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



Area  
**TMR-Sarasota**  
Machine Id  
**23818 LIEBHERR A934 1006-38725**  
Component  
**Swing Drive**  
Fluid  
**GEAR OIL SAE 85W140 (10 LTR)**

## RECOMMENDATION

We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>DJJ0023212</b>	DJJ0008526	DJJ0008470
Sample Date		Client Info		<b>14 Jun 2024</b>	19 Jan 2023	23 Nov 2021
Machine Age	hrs	Client Info		<b>18889</b>	18127	16762
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>	N/A	Changed
Filter Changed		Client Info		<b>Not Changed</b>	N/A	N/A
Sample Status				<b>SEVERE</b>	ATTENTION	SEVERE

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>1700	<b>299</b>	7	1329
Chromium	ppm	ASTM D5185m	>15	<b>3</b>	<1	14
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	3
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	6
Aluminum	ppm	ASTM D5185m	>4	<b>2</b>	0	4
Lead	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>550	<b>410</b>	10	▲ 900
Tin	ppm	ASTM D5185m	>30	<b>15</b>	<1	▲ 25
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

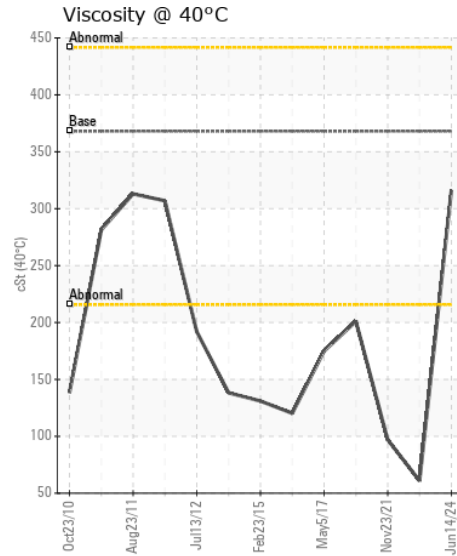
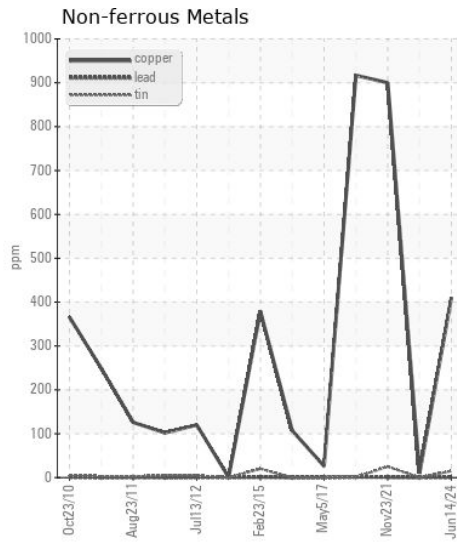
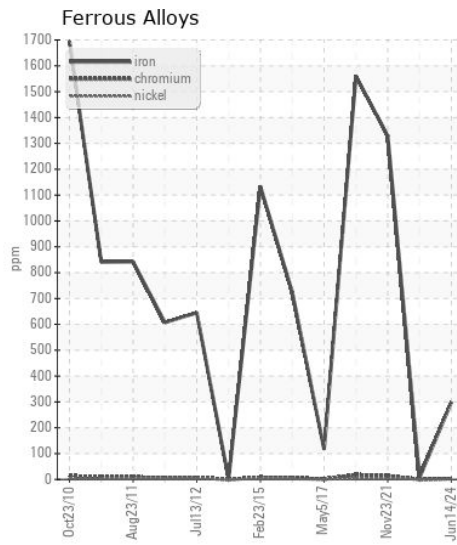
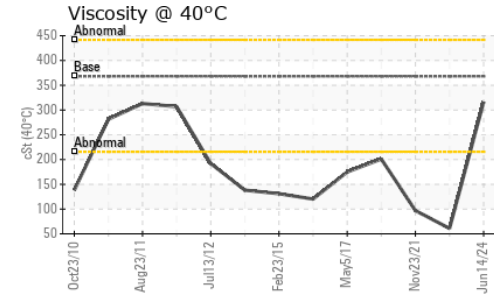
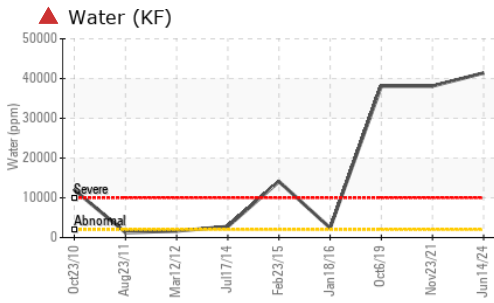
There is a high concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>15</b>	1	6
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	3
Water	%	ASTM D6304	>0.2	<b>▲ 4.14</b>	---	▲ 3.81
ppm Water	ppm	ASTM D6304	>2000	<b>▲ 41400</b>	---	▲ 38100
Silt	scalar	*Visual	NONE	<b>MODER</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>● MILKY</b>	NORML	● MILKY
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>▲ 0.2%</b>	NEG	▲ 0.2%

## FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		<b>6</b>	0	2
Boron	ppm	ASTM D5185m	400	<b>31</b>	8	15
Barium	ppm	ASTM D5185m	200	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	12	<b>3</b>	9	7
Manganese	ppm	ASTM D5185m		<b>2</b>	0	11
Magnesium	ppm	ASTM D5185m	12	<b>23</b>	● 40	15
Calcium	ppm	ASTM D5185m	150	<b>110</b>	● 199	145
Phosphorus	ppm	ASTM D5185m	1650	<b>616</b>	● 442	899
Zinc	ppm	ASTM D5185m	125	<b>230</b>	● 498	306
Sulfur	ppm	ASTM D5185m	22500	<b>17145</b>	● 1538	5994
Visc @ 40°C	cSt	ASTM D445	368	<b>316</b>	● 60.9	96.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DJJ0023212 **Received** : 20 Jun 2024  
**Lab Number** : 06216164 **Tested** : 21 Jun 2024  
**Unique Number** : 11089028 **Diagnosed** : 23 Jun 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: KF )

TRADEMARK METALS RECYCLING - SARASOTA - MYRTLE ST  
 1735 MYRTLE STREET  
 SARASOTA, FL  
 US 34234  
 Contact: RYAN BOWDEN

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)

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