



# OIL ANALYSIS REPORT

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

Machine Id  
**22702**  
Component  
**Right Final Drive**  
Fluid  
**GEAR OIL SAE 80W90 (--- GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

## WEAR

The copper level is abnormal. All other component wear rates are normal.

## CONTAMINATION

There is no indication of any contamination in the oil.

## FLUID CONDITION

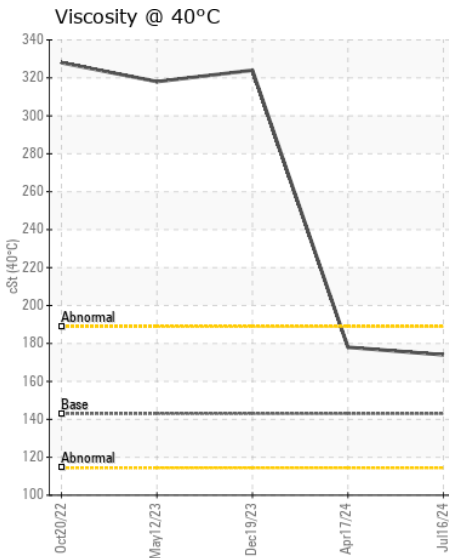
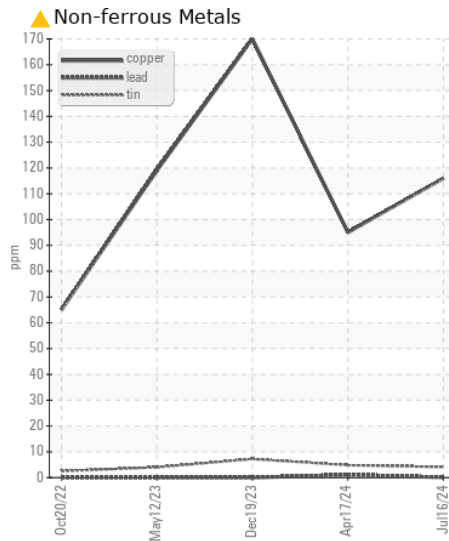
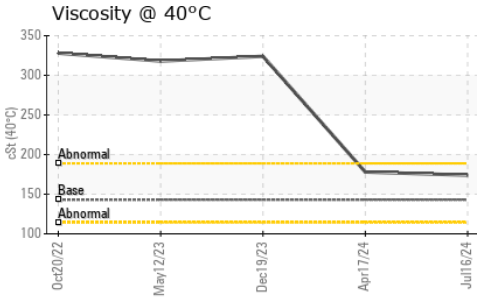
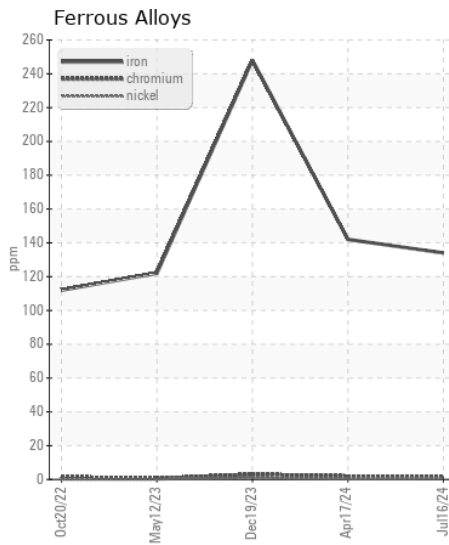
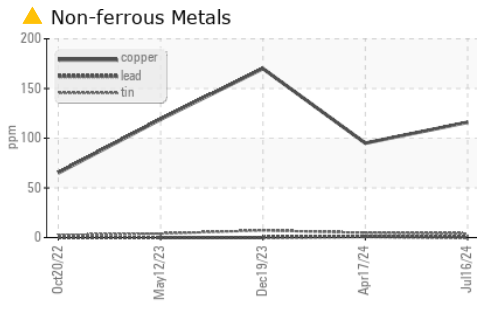
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0950651</b>	WC0924555	WC0846620
Sample Date		Client Info		<b>16 Jul 2024</b>	17 Apr 2024	19 Dec 2023
Machine Age	hrs	Client Info		<b>2988</b>	2519	2035
Oil Age	hrs	Client Info		<b>1000</b>	500	250
Filter Age	hrs	Client Info		<b>1000</b>	500	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Changed</b>	Not Changd	N/A
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

Iron	ppm	ASTM D5185m	>500	<b>134</b>	142	248
Chromium	ppm	ASTM D5185m	>10	<b>1</b>	2	3
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>1</b>	2	2
Lead	ppm	ASTM D5185m	>25	<b>&lt;1</b>	1	0
Copper	ppm	ASTM D5185m	>50	<b>▲ 116</b>	<b>▲ 95</b>	<b>▲ 170</b>
Tin	ppm	ASTM D5185m	>10	<b>4</b>	5	7
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

Silicon	ppm	ASTM D5185m	>75	<b>8</b>	7	10
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	2
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

Sodium	ppm	ASTM D5185m	>170	<b>2</b>	4	5
Boron	ppm	ASTM D5185m	400	<b>60</b>	80	3
Barium	ppm	ASTM D5185m	200	<b>19</b>	23	54
Molybdenum	ppm	ASTM D5185m	12	<b>7</b>	8	0
Manganese	ppm	ASTM D5185m		<b>1</b>	2	4
Magnesium	ppm	ASTM D5185m	12	<b>12</b>	10	2
Calcium	ppm	ASTM D5185m	150	<b>17</b>	43	29
Phosphorus	ppm	ASTM D5185m	1650	<b>1365</b>	1423	1189
Zinc	ppm	ASTM D5185m	125	<b>37</b>	49	60
Sulfur	ppm	ASTM D5185m	22500	<b>21631</b>	25231	26462
Visc @ 40°C	cSt	ASTM D445	143	<b>174</b>	178	324



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0950651  
**Lab Number** : 06240722  
**Unique Number** : 11129556  
**Test Package** : CONST

**Received** : 18 Jul 2024  
**Tested** : 19 Jul 2024  
**Diagnosed** : 20 Jul 2024 - Don Baldrige

**SULLIVAN EASTERN INC-LIEBHERR**  
 2860 C SLATER RD  
 MORRISVILLE, NC  
 US 27560  
 Contact: CHRIS CALTON

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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