



# OIL ANALYSIS REPORT

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

Machine Id  
**LIEBHERR 22666**  
 Component  
**Right Final Drive**  
 Fluid  
**GEAR OIL SAE 80W90 (--- QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

## WEAR

All component wear rates are normal.

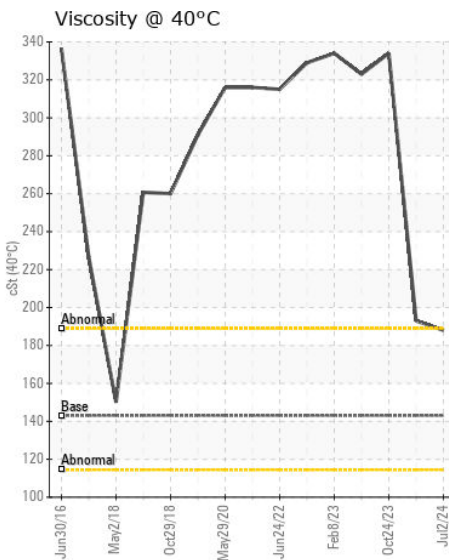
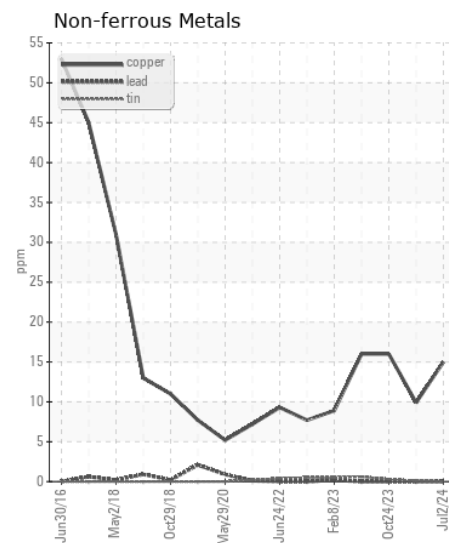
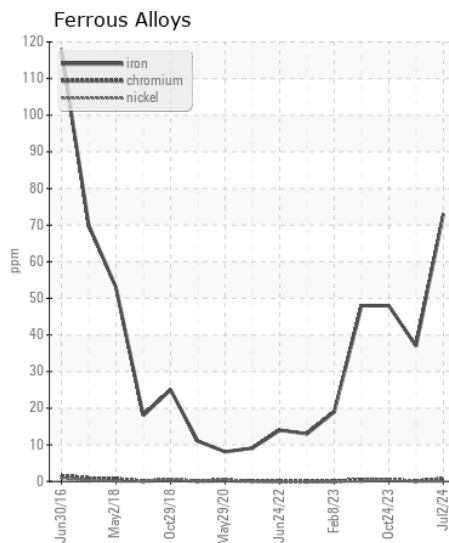
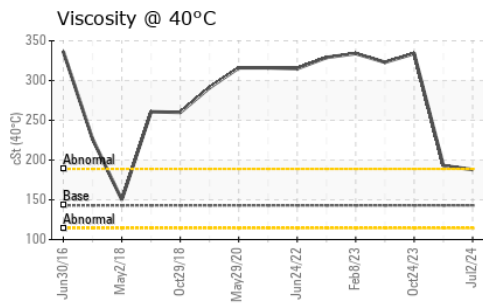
## CONTAMINATION

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>WC0950722</b>	WC0905404	WC0856951
Sample Date		Client Info		<b>02 Jul 2024</b>	08 Feb 2024	24 Oct 2023
Machine Age	hrs	Client Info		<b>12663</b>	12146	11692
Oil Age	hrs	Client Info		<b>1000</b>	250	1750
Filter Age	hrs	Client Info		<b>1000</b>	0	1750
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL
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Iron	ppm	ASTM D5185m	>500	<b>73</b>	37	48
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>1</b>	1	<1
Lead	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>15</b>	10	16
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
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Silicon	ppm	ASTM D5185m	>75	<b>9</b>	8	4
Potassium	ppm	ASTM D5185m	>20	<b>11</b>	5	10
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>	LIGHT	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
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Sodium	ppm	ASTM D5185m	>170	<b>4</b>	2	3
Boron	ppm	ASTM D5185m	400	<b>103</b>	130	105
Barium	ppm	ASTM D5185m	200	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m	12	<b>5</b>	3	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	12	<b>5</b>	9	13
Calcium	ppm	ASTM D5185m	150	<b>55</b>	41	16
Phosphorus	ppm	ASTM D5185m	1650	<b>1980</b>	2047	1039
Zinc	ppm	ASTM D5185m	125	<b>44</b>	38	25
Sulfur	ppm	ASTM D5185m	22500	<b>23098</b>	19958	24293
Visc @ 40°C	cSt	ASTM D445	143	<b>188</b>	193	334



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0950722  
**Lab Number** : 06233630  
**Unique Number** : 11117123  
**Test Package** : CONST  
**Received** : 11 Jul 2024  
**Tested** : 12 Jul 2024  
**Diagnosed** : 12 Jul 2024 - Wes Davis

**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)