



# OIL ANALYSIS REPORT

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

Machine Id  
**3069**  
 Component  
**Rear Differential**  
 Fluid  
**GEAR OIL SAE 75W90 (--- GAL)**

## RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

## WEAR

The iron level is severe. Gear wear is indicated.

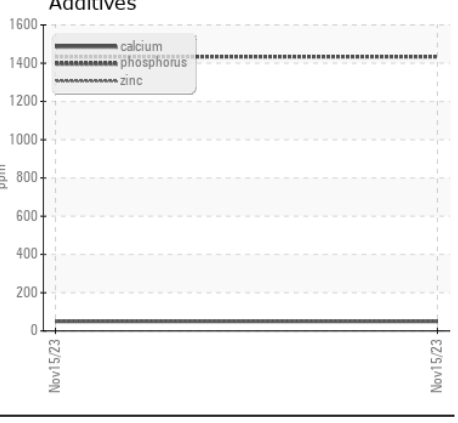
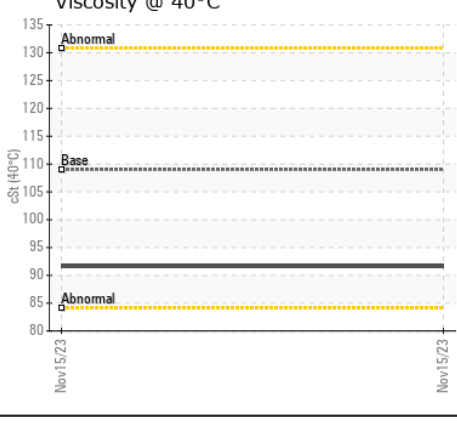
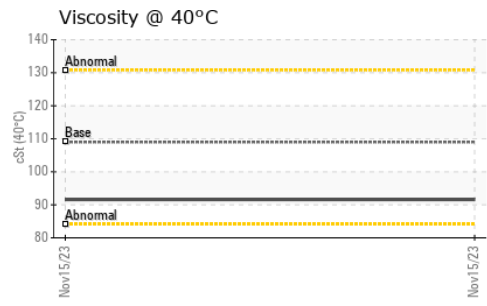
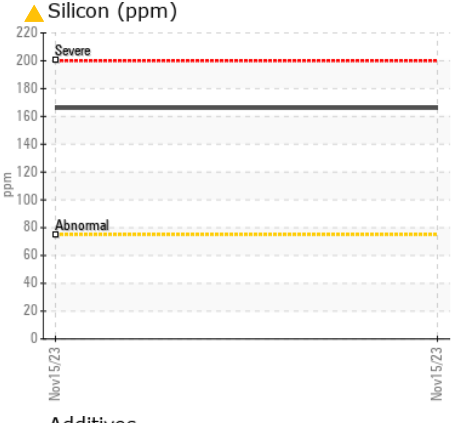
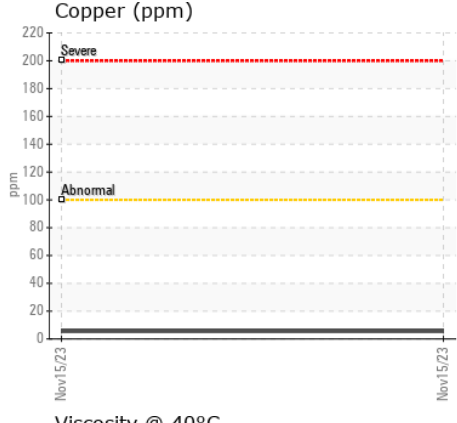
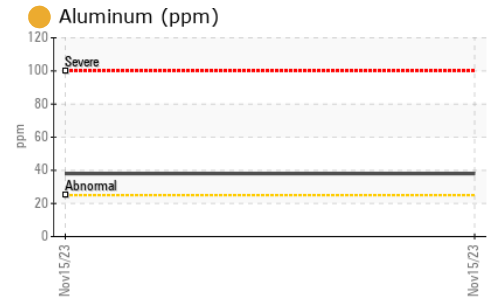
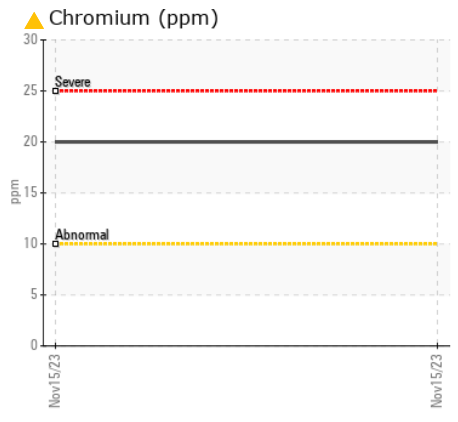
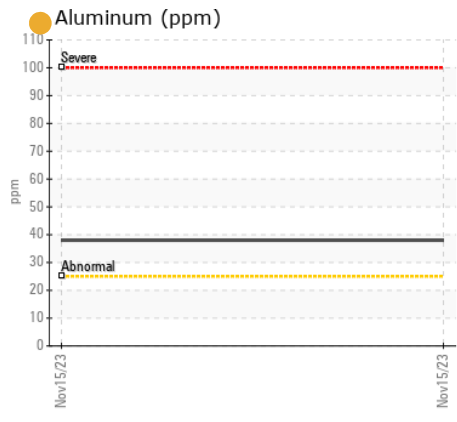
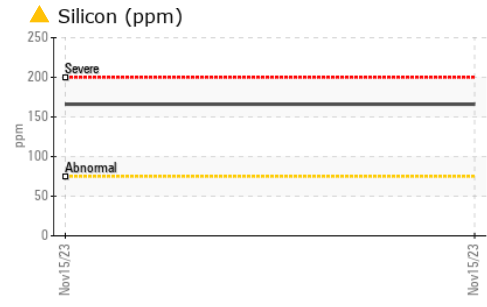
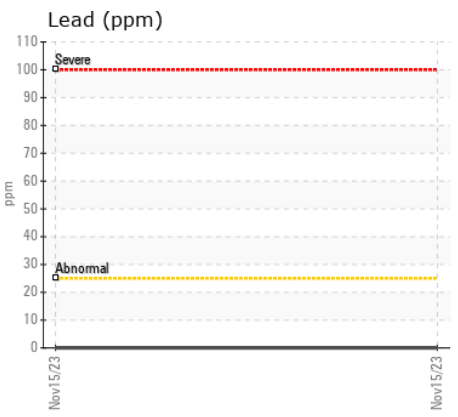
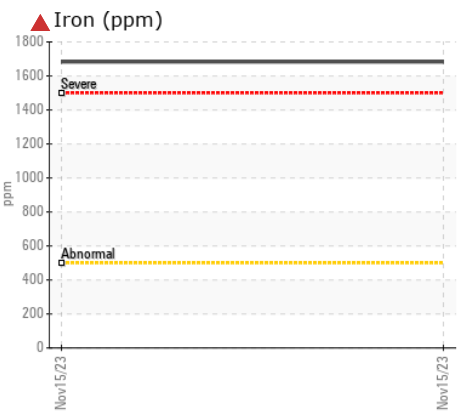
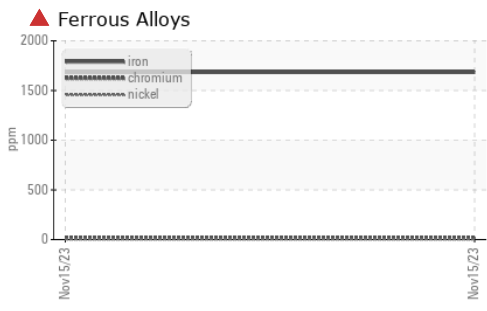
## CONTAMINATION

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

## FLUID CONDITION

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0650540</b>	---	---
Sample Date		Client Info		<b>15 Nov 2023</b>	---	---
Machine Age	mls	Client Info		<b>0</b>	---	---
Oil Age	mls	Client Info		<b>0</b>	---	---
Filter Age	mls	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>N/A</b>	---	---
Filter Changed		Client Info		<b>N/A</b>	---	---
Sample Status				<b>SEVERE</b>	---	---
Iron	ppm	ASTM D5185m	>500	<b>▲ 1683</b>	---	---
Chromium	ppm	ASTM D5185m	>10	<b>▲ 20</b>	---	---
Nickel	ppm	ASTM D5185m	>10	<b>3</b>	---	---
Titanium	ppm	ASTM D5185m		<b>2</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>25	<b>● 38</b>	---	---
Lead	ppm	ASTM D5185m	>25	<b>0</b>	---	---
Copper	ppm	ASTM D5185m	>100	<b>6</b>	---	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Silicon	ppm	ASTM D5185m	>75	<b>▲ 166</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	---	---
Water		WC Method	>.2	<b>NEG</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>LIGHT</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>.2	<b>NEG</b>	---	---
Sodium	ppm	ASTM D5185m		<b>18</b>	---	---
Boron	ppm	ASTM D5185m	400	<b>210</b>	---	---
Barium	ppm	ASTM D5185m	200	<b>8</b>	---	---
Molybdenum	ppm	ASTM D5185m	12	<b>2</b>	---	---
Manganese	ppm	ASTM D5185m		<b>29</b>	---	---
Magnesium	ppm	ASTM D5185m	12	<b>19</b>	---	---
Calcium	ppm	ASTM D5185m	150	<b>50</b>	---	---
Phosphorus	ppm	ASTM D5185m	1650	<b>1434</b>	---	---
Zinc	ppm	ASTM D5185m	125	<b>54</b>	---	---
Sulfur	ppm	ASTM D5185m	22500	<b>29724</b>	---	---
Visc @ 40°C	cSt	ASTM D445	109	<b>91.6</b>	---	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0650540 **Received** : 15 Nov 2023  
**Lab Number** : 06009224 **Tested** : 16 Nov 2023  
**Unique Number** : 10742986 **Diagnosed** : 17 Nov 2023 - Angela Borella  
**Test Package** : MOB1+

**LTI/MILKY WAY - SUNNYSIDE**  
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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)