



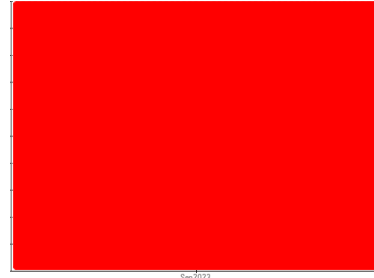
# PROBLEM SUMMARY

Sample Rating Trend

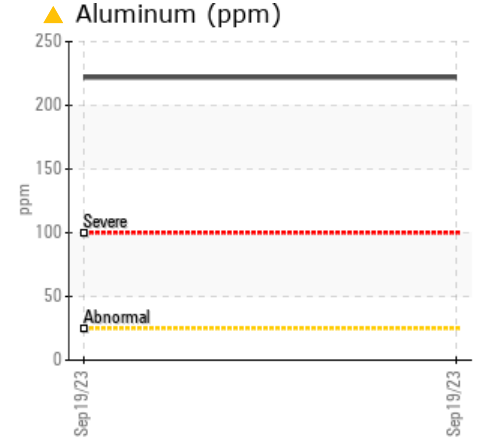
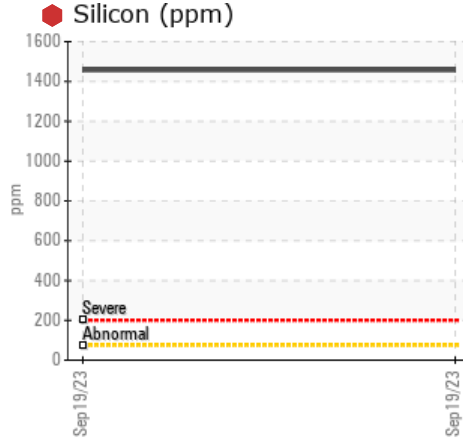
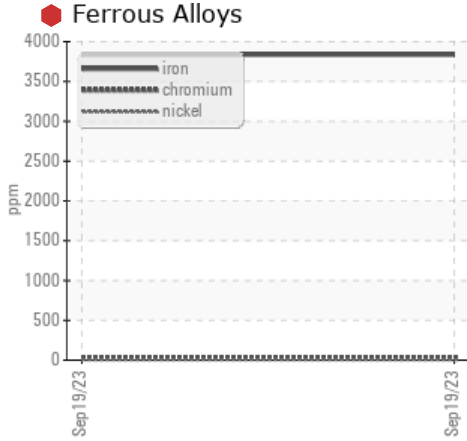
WEAR



Area  
**[19320]**  
Machine Id  
**20-20**  
Component  
**Left Final Drive**  
Fluid  
**CONOCO PHILLIPS 80W90 (--- GAL)**



## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. ( Customer Sample Comment: ConocoPhillips 80w/90 )

## PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	---	---
Iron	ppm	ASTM D5185m	>500	<b>3837</b>	---	---
Chromium	ppm	ASTM D5185m	>10	<b>25</b>	---	---
Aluminum	ppm	ASTM D5185m	>25	<b>222</b>	---	---
Silicon	ppm	ASTM D5185m	>75	<b>1457</b>	---	---

Customer Id: MANTUL  
Sample No.: WC0818632  
Lab Number: 05968458  
Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Doug Bogart +1 (800)237-1369 x4016  
[dougb@wearcheckusa.com](mailto:dougb@wearcheckusa.com)

To change component or sample information:  
Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend

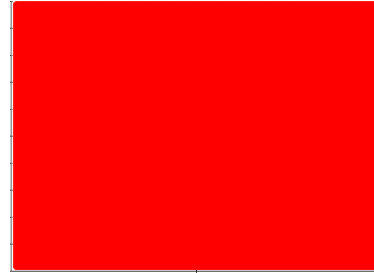
WEAR

Area  
**[19320]**

Machine Id  
**20-20**

Component  
**Left Final Drive**

Fluid  
**CONOCO PHILLIPS 80W90 (--- GAL)**



## DIAGNOSIS

### Recommendation

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. ( Customer Sample Comment: ConocoPhillips 80w/90 )

### Wear

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 due to the presence of contaminants.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0818632</b>	---	---
Sample Date	Client Info		<b>19 Sep 2023</b>	---	---
Machine Age	hrs	Client Info	<b>7973</b>	---	---
Oil Age	hrs	Client Info	<b>973</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>SEVERE</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	<b>3837</b>	---	---
Chromium	ppm	ASTM D5185m >10	<b>25</b>	---	---
Nickel	ppm	ASTM D5185m >10	<b>6</b>	---	---
Titanium	ppm	ASTM D5185m	<b>16</b>	---	---
Silver	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Aluminum	ppm	ASTM D5185m >25	<b>222</b>	---	---
Lead	ppm	ASTM D5185m >25	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m >50	<b>9</b>	---	---
Tin	ppm	ASTM D5185m >10	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>1</b>	---	---
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>96</b>	---	---
Barium	ppm	ASTM D5185m	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	<b>4</b>	---	---
Manganese	ppm	ASTM D5185m	<b>25</b>	---	---
Magnesium	ppm	ASTM D5185m	<b>29</b>	---	---
Calcium	ppm	ASTM D5185m	<b>172</b>	---	---
Phosphorus	ppm	ASTM D5185m	<b>782</b>	---	---
Zinc	ppm	ASTM D5185m	<b>28</b>	---	---
Sulfur	ppm	ASTM D5185m	<b>27829</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	<b>1457</b>	---	---
Sodium	ppm	ASTM D5185m	<b>13</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>50</b>	---	---

## VISUAL

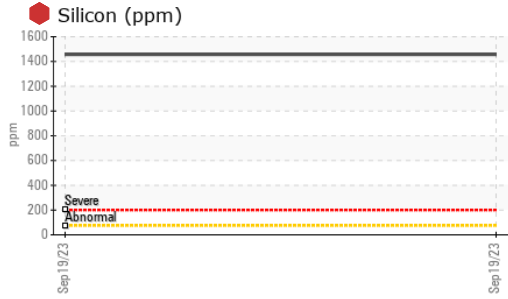
	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual NONE	<b>NONE</b>	---	---
Precipitate	scalar	*Visual NONE	<b>NONE</b>	---	---
Silt	scalar	*Visual NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual >0.2	<b>NEG</b>	---	---
Free Water	scalar	*Visual	<b>NEG</b>	---	---

## FLUID PROPERTIES

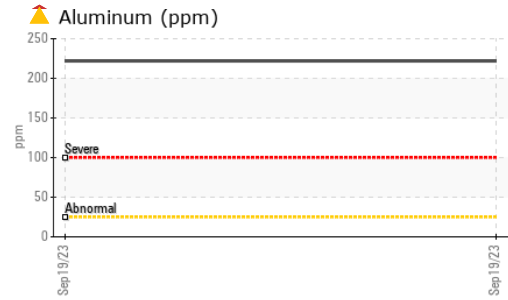
	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	<b>139</b>	---	---



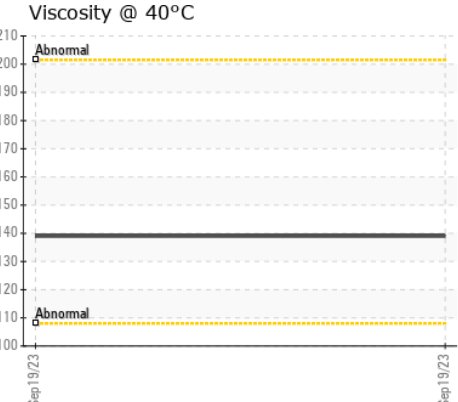
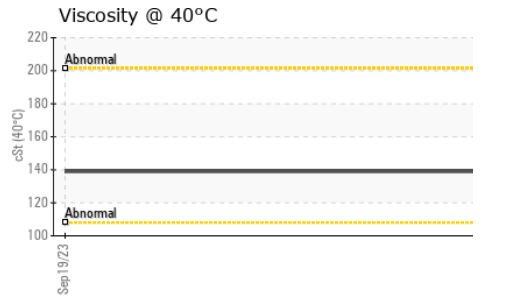
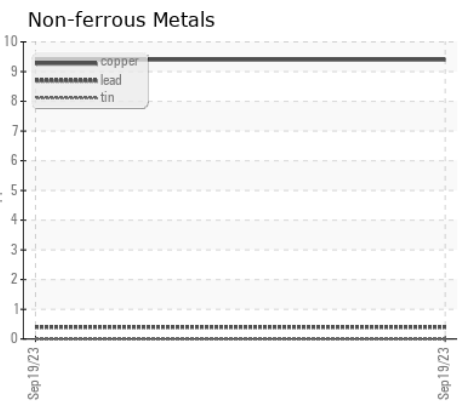
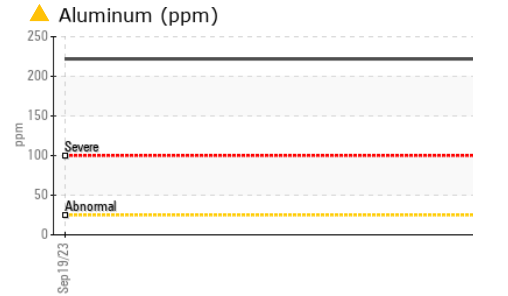
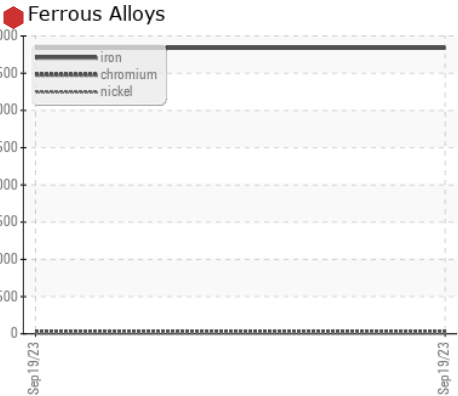
# OIL ANALYSIS REPORT



SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			no image	no image	no image
Bottom			no image	no image	no image



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0818632      **Received** : 03 Oct 2023  
**Lab Number** : 05968458      **Diagnosed** : 04 Oct 2023  
**Unique Number** : 10675009      **Diagnostician** : Doug Bogart  
**Test Package** : CONST

**MANHATTAN ROAD AND BRIDGE**  
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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)