

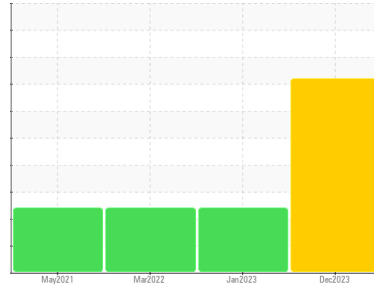


# PROBLEM SUMMARY



Area  
**[20420]**  
 Machine Id  
**40-142**  
 Component  
**Left Final Drive**  
 Fluid  
**CONOCO PHILLIPS GUARDOL ECT 15W40 (--- GAL)**

Sample Rating Trend

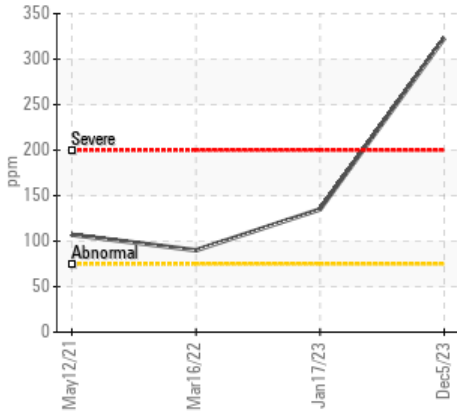


**DIRT**

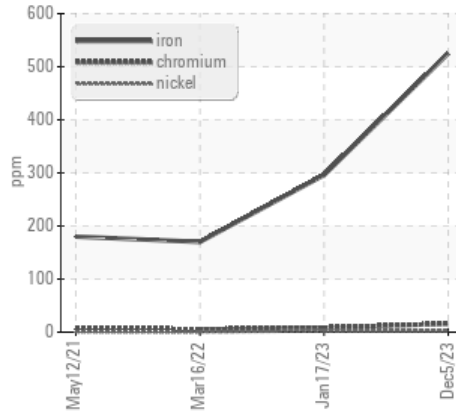


## COMPONENT CONDITION SUMMARY

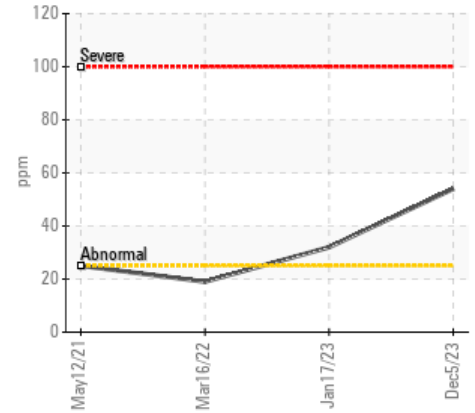
**Silicon (ppm)**



**Ferrous Alloys**



**Aluminum (ppm)**



## RECOMMENDATION

We advise that you check all areas where dirt can enter the system. 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.

## PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>500	▲ 525	296	170
Chromium	ppm	ASTM D5185m	>10	▲ 16	8	5
Silicon	ppm	ASTM D5185m	>75	● 323	▲ 135	▲ 90

Customer Id: MANTUL  
 Sample No.: WC0836252  
 Lab Number: 06077884  
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

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
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
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

### 17 Jan 2023 Diag: Don Baldrige

DIRT



We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor. All component wear rates are normal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The condition of the oil is acceptable for the time in service.

view report



### 16 Mar 2022 Diag: Jonathan Hester

DIRT



We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor. All component wear rates are normal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The condition of the oil is acceptable for the time in service.

view report



### 12 May 2021 Diag: Jonathan Hester

DIRT



We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The condition of the oil is acceptable for the time in service.

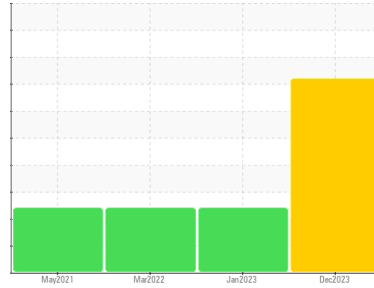
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



**DIRT**



Area  
**[20420]**  
 Machine Id  
**40-142**  
 Component  
**Left Final Drive**  
 Fluid  
**CONOCO PHILLIPS GUARDOL ECT 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

We advise that you check all areas where dirt can enter the system. 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.

### 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>WC0836252</b>	WC0754800	WC0619449
Sample Date	Client Info		<b>05 Dec 2023</b>	17 Jan 2023	16 Mar 2022
Machine Age	hrs	Client Info	<b>7895</b>	7425	6945
Oil Age	hrs	Client Info	<b>1627</b>	1158	0
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	N/A
Sample Status			<b>SEVERE</b>	ABNORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	<b>▲ 525</b>	296	170
Chromium	ppm	ASTM D5185m >10	<b>▲ 16</b>	8	5
Nickel	ppm	ASTM D5185m >10	<b>2</b>	2	<1
Titanium	ppm	ASTM D5185m	<b>4</b>	2	1
Silver	ppm	ASTM D5185m	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >25	<b>▲ 54</b>	▲ 32	▲ 19
Lead	ppm	ASTM D5185m >25	<b>&lt;1</b>	2	0
Copper	ppm	ASTM D5185m >50	<b>5</b>	3	<1
Tin	ppm	ASTM D5185m >10	<b>0</b>	<1	0
Antimony	ppm	ASTM D5185m >5	<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>1</b>	<1	<1
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 85	<b>105</b>	113	124
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>4</b>	3	2
Manganese	ppm	ASTM D5185m	<b>6</b>	3	2
Magnesium	ppm	ASTM D5185m 350	<b>678</b>	733	686
Calcium	ppm	ASTM D5185m 1800	<b>1299</b>	1495	1406
Phosphorus	ppm	ASTM D5185m 1000	<b>1049</b>	1102	1136
Zinc	ppm	ASTM D5185m 1100	<b>1192</b>	1319	1263
Sulfur	ppm	ASTM D5185m 3500	<b>4068</b>	4801	3810

## CONTAMINANTS

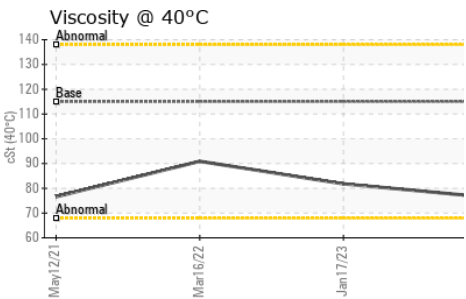
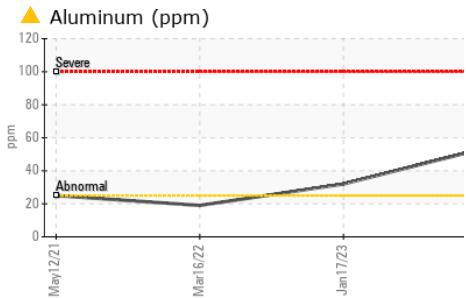
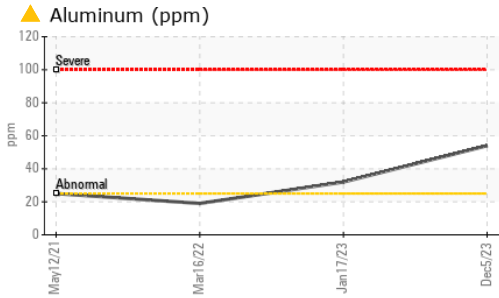
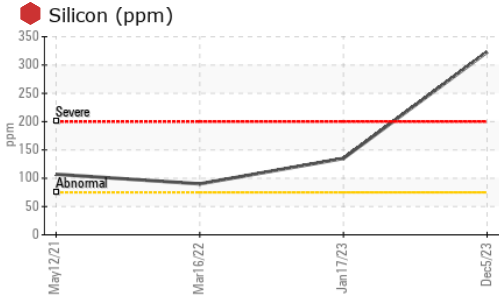
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	<b>323</b>	▲ 135	▲ 90
Sodium	ppm	ASTM D5185m	<b>3</b>	5	4
Potassium	ppm	ASTM D5185m >20	<b>18</b>	11	9

## VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual NONE	<b>NONE</b>	LIGHT	NONE
Debris	scalar	*Visual NONE	<b>NONE</b>	VLITE	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
Free Water	scalar	*Visual	<b>NEG</b>	---	---



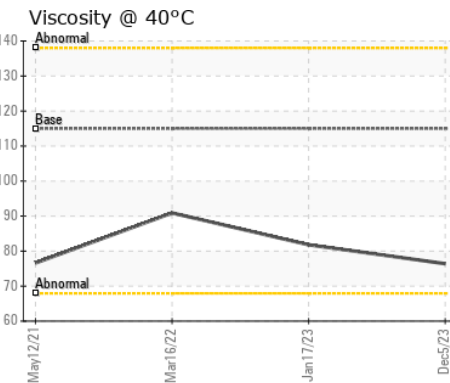
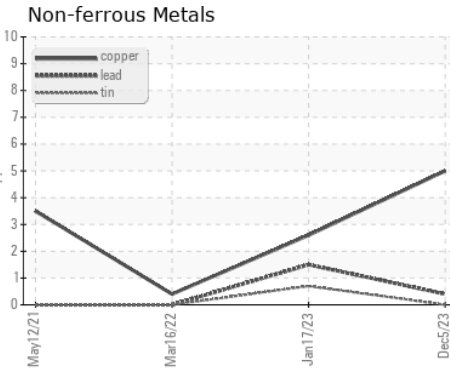
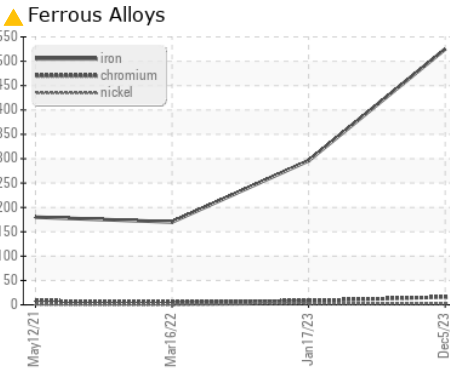
# OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	115	76.4	81.8	90.9

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

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0836252      **Received** : 01 Feb 2024  
**Lab Number** : 06077884      **Diagnosed** : 04 Feb 2024  
**Unique Number** : 10859975      **Diagnostician** : Don Baldrige  
**Test Package** : CONST

**MANHATTAN ROAD AND BRIDGE**  
 5601 S 122ND E AVE  
 TULSA, OK  
 US 74146  
 Contact: WILL ANDERSON  
 will.anderson@manhattanrb.com

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)

T:  
F: