

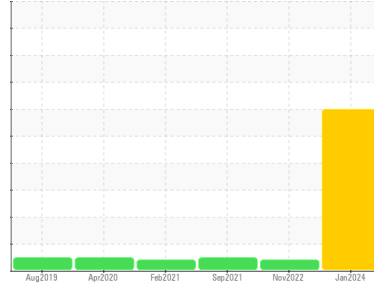
# PROBLEM SUMMARY

Sample Rating Trend

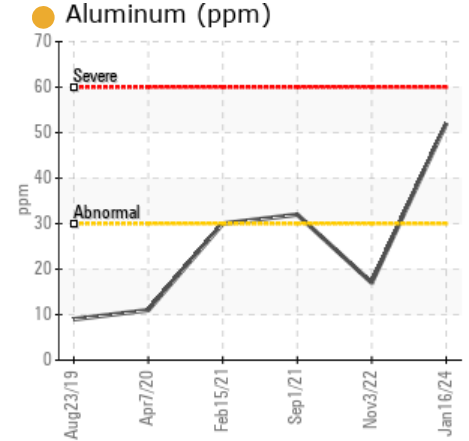
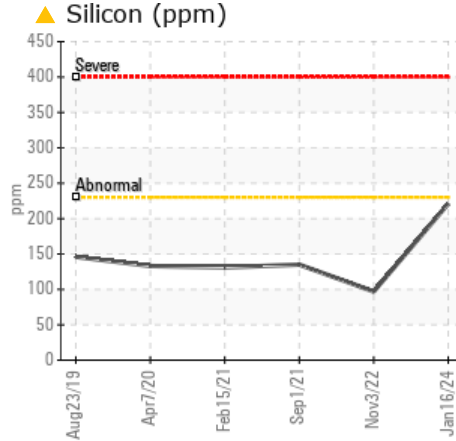
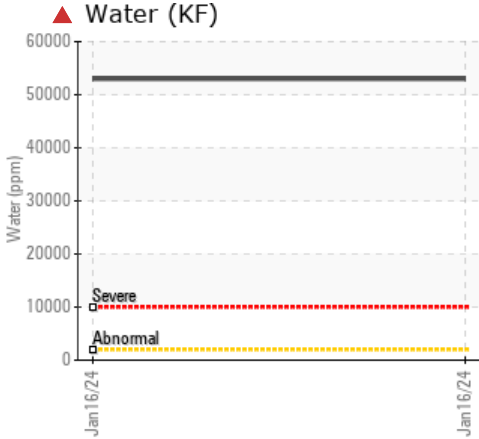
**WATER**



Machine Id  
**DT637**  
Component  
**Front Differential**  
Fluid  
**CHEVRON RPM SYNTHETIC GEAR 75W90 (4 mls)**



## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	NORMAL
Silicon	ppm	ASTM D5185m	>230	▲ <b>221</b>	97	135
Water	%	ASTM D6304	>.2	▲ <b>5.30</b>	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ <b>53000</b>	---	---
Debris	scalar	*Visual	NONE	▲ <b>MODER</b>	▲ MODER	VLITE
Emulsified Water	scalar	*Visual	>.2	▲ <b>0.2%</b>	NEG	NEG

Customer Id: NWWUDUN  
Sample No.: PCA0089178  
Lab Number: 06104810  
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Sean Felton +1 919-379-4092  
[sfelton@wearcheckusa.com](mailto:sfelton@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
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.
Check Water Access	---	---	?	We advise that you check for the source of water entry.

## HISTORICAL DIAGNOSIS

### 03 Nov 2022 Diag: Angela Borella

VIS DEBRIS



Resample at the next service interval to monitor. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The condition of the oil is acceptable for the time in service.

view report



### 01 Sep 2021 Diag: Jonathan Hester

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report



### 15 Feb 2021 Diag: Don Baldrige

VIS DEBRIS



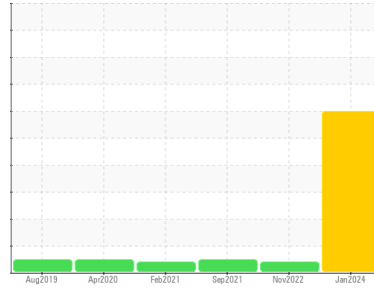
No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The condition of the oil is acceptable for the time in service.

view report



# OIL ANALYSIS REPORT

## Sample Rating Trend



**WATER**



Machine Id  
**DT637**  
Component  
**Front Differential**  
Fluid  
**CHEVRON RPM SYNTHETIC GEAR 75W90 (4 mls)**

## DIAGNOSIS

### ▲ Recommendation

We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

### ● Wear

All component wear rates are normal.

### ▲ Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a high concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil.

### 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>PCA0089178</b>	PCA0080452	PCA0050644
Sample Date	Client Info		<b>16 Jan 2024</b>	03 Nov 2022	01 Sep 2021
Machine Age	mls	Client Info	<b>232545</b>	192431	0
Oil Age	mls	Client Info	<b>71752</b>	31638	0
Oil Changed	Client Info		<b>Changed</b>	Not Changd	Not Changd
Sample Status			<b>SEVERE</b>	ABNORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >1200	<b>410</b>	459	246
Chromium	ppm	ASTM D5185m >8	<b>3</b>	4	2
Nickel	ppm	ASTM D5185m >20	<b>15</b>	11	8
Titanium	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >30	<b>52</b>	17	32
Lead	ppm	ASTM D5185m >25	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>1</b>	1	<1
Tin	ppm	ASTM D5185m >5	<b>0</b>	<1	0
Antimony	ppm	ASTM D5185m >5	<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>156</b>	207	204
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>4</b>	4	0
Manganese	ppm	ASTM D5185m	<b>4</b>	4	2
Magnesium	ppm	ASTM D5185m	<b>29</b>	29	11
Calcium	ppm	ASTM D5185m	<b>29</b>	54	33
Phosphorus	ppm	ASTM D5185m	<b>1396</b>	1265	1220
Zinc	ppm	ASTM D5185m	<b>57</b>	43	28
Sulfur	ppm	ASTM D5185m	<b>25340</b>	25056	20482

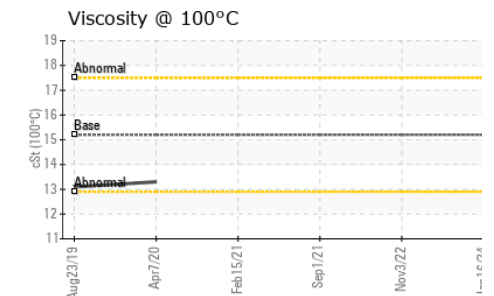
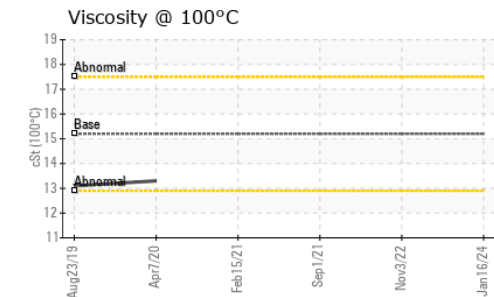
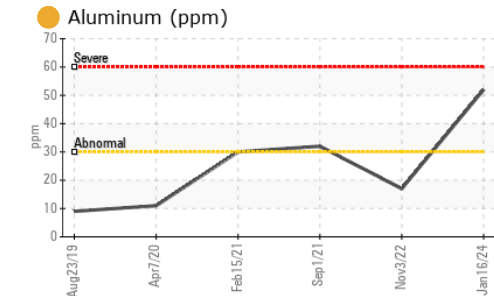
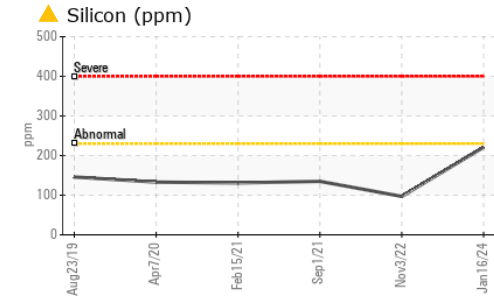
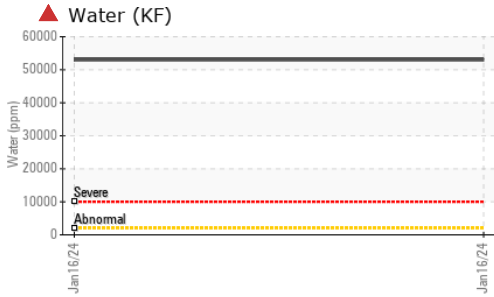
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >230	<b>▲ 221</b>	97	135
Sodium	ppm	ASTM D5185m	<b>4</b>	2	4
Potassium	ppm	ASTM D5185m >20	<b>5</b>	2	2
Water	%	ASTM D6304 >.2	<b>▲ 5.30</b>	---	---
ppm Water	ppm	ASTM D6304 >2000	<b>▲ 53000</b>	---	---

## VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	<b>NONE</b>	MODER	LIGHT
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>	NONE	NONE
Debris	scalar	*Visual NONE	<b>▲ MODER</b>	▲ MODER	VLITE
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 >.2	<b>▲ 0.2%</b>	NEG	NEG
Free Water	scalar	*Visual	<b>NEG</b>	NEG	NEG

# OIL ANALYSIS REPORT

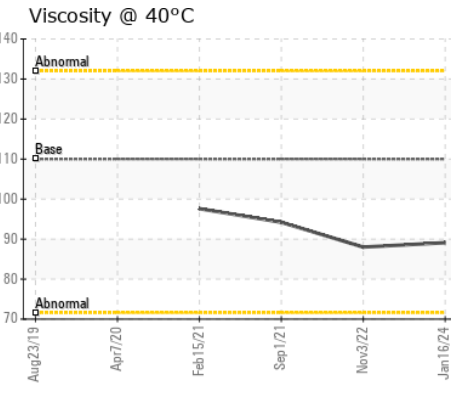
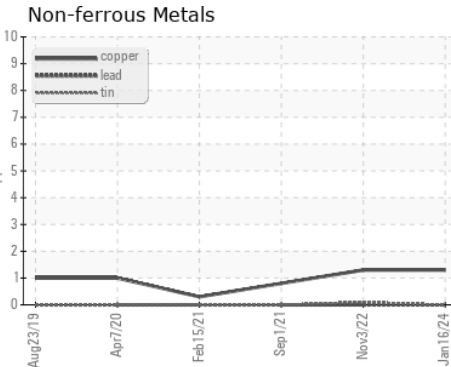
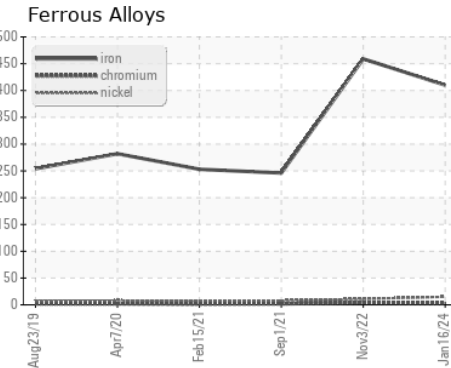


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	110	<b>89.1</b>	88.0	94.2

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

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0089178 **Received** : 29 Feb 2024  
**Lab Number** : **06104810** **Tested** : 05 Mar 2024  
**Unique Number** : 10903040 **Diagnosed** : 05 Mar 2024 - Sean Felton  
**Test Package** : FLEET ( Additional Tests: FT-IR, KF, KV100 )

**NW WHITE & CO - GREER DIVISION**  
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 DUNCAN, SC  
 US 29334  
 Contact: Matt Quinlan  
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 T: (864)905-8506  
 F:

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)