

## **PROBLEM SUMMARY**

# Sample Rating Trend

DIRT



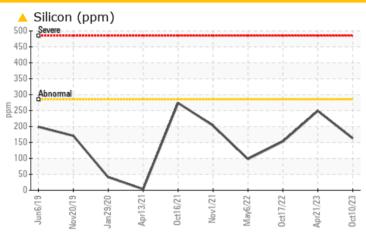


Machine Id DT631 Component

**Rear Differential** 

**CHEVRON RPM SYNTHETIC GEAR 75W90 (3 mls)** 







## RECOMMENDATION

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Aluminum	ppm	ASTM D5185m	>40	<b>43</b>	<u>▲</u> 82	<u></u> 54
Silicon	ppm	ASTM D5185m	>285	<b>163</b>	<u>4</u> 249	<u>153</u>

Customer Id: NWWPIE Sample No.: PCA0103297 Lab Number: 05977423 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:

Don Baldridge +1 don.b505@comcast.net

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

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Check Dirt Access			?	We advise that you check all areas where dirt can enter the system.

## HISTORICAL DIAGNOSIS

## 21 Apr 2023 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. Gear wear is indicated. 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.



## 17 Oct 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.



#### 06 May 2022 Diag: Don Baldridge

VIS DEBRIS



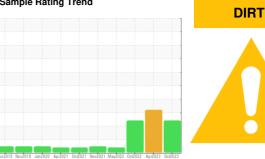
No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The condition of the oil is acceptable for the time in service.





## **OIL ANALYSIS REPORT**

## Sample Rating Trend





**DT631** Component **Rear Differential** 

**CHEVRON RPM SYNTHE** 

## **DIAGNOSIS**

## Recommendation

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.

## Contamination

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

## **Fluid Condition**

The condition of the oil is acceptable for the time in service.

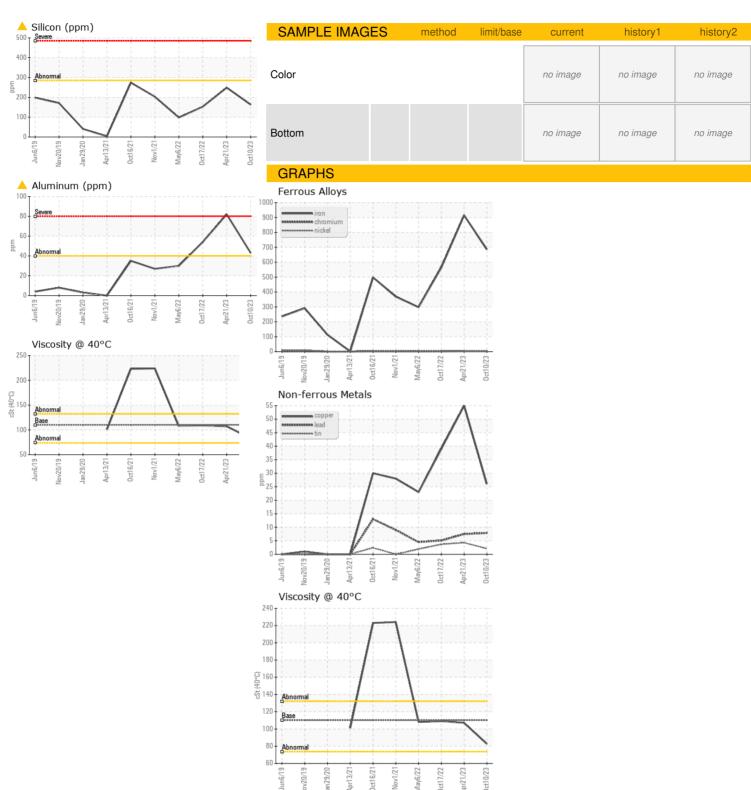
FIC GEAR 75W90	(3 11115)	Jun2019 Nov2	019 Jan2020 Apr2021 Oct20	121 Nov2021 May2022 Oct2022 Apr2	023 Oct2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0103297	PCA0091168	PCA0080961
Sample Date		Client Info		10 Oct 2023	21 Apr 2023	17 Oct 2022
Machine Age	mls	Client Info		257872	231859	206336
Oil Age	mls	Client Info		231859	181798	182293
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>870	686	<b>△</b> 915	565
Chromium	ppm	ASTM D5185m	>8	3	4	2
Nickel	ppm	ASTM D5185m	>25	4	3	<1
Titanium	ppm	ASTM D5185m	>4	3	4	3
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>40	<b>43</b>	<u>▲</u> 82	<u></u> 54
Lead	ppm	ASTM D5185m	>25	8	8	5
Copper	ppm	ASTM D5185m	>60	26	55	39
Tin	ppm	ASTM D5185m	>5	2	4	4
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		<1	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		153	234	230
Barium	ppm	ASTM D5185m		2	0	<1
Molybdenum	ppm	ASTM D5185m		20	14	13
Manganese	ppm	ASTM D5185m		6	7	4
Magnesium	ppm	ASTM D5185m		166	61	58
Calcium	ppm	ASTM D5185m		270	135	132
Phosphorus	ppm	ASTM D5185m		1212	1327	1309
Zinc	ppm	ASTM D5185m		278	108	101
Sulfur	ppm	ASTM D5185m		19594	18696	21829
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>285	<b>163</b>	<u> </u>	<u></u> ▲ 153
Sodium	ppm	ASTM D5185m		6	8	5
Potassium	ppm	ASTM D5185m	>20	13	19	9
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

cSt

ASTM D445 110



## **OIL ANALYSIS REPORT**





Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10689373

: PCA0103297 : 05977423 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 12 Oct 2023 Diagnosed

: 16 Oct 2023 Diagnostician : Don Baldridge

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)

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