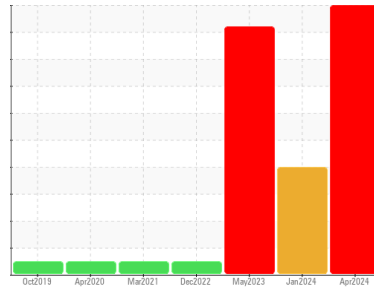


PROBLEM SUMMARY

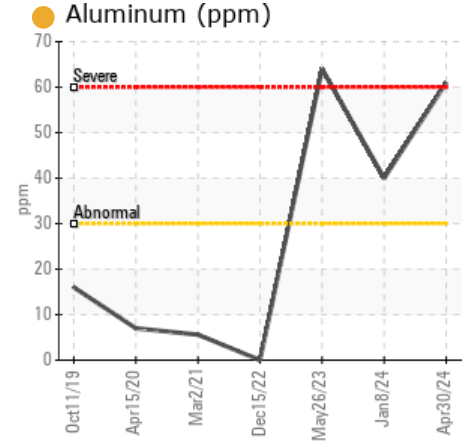
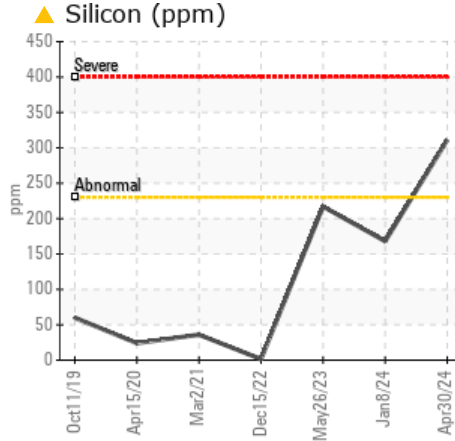
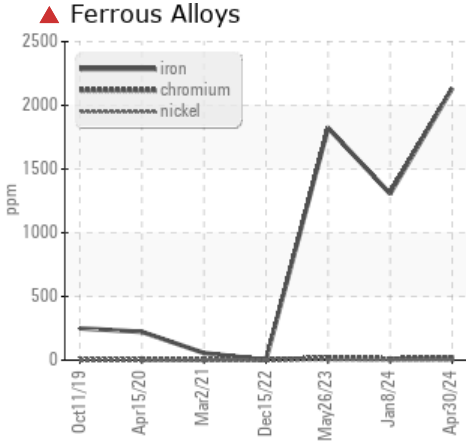


Machine Id
DT641
Component
Rear Differential
Fluid
CHEVRON RPM SYNTHETIC GEAR 75W90 (3 mls)

Sample Rating Trend



COMPONENT CONDITION SUMMARY



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 advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	SEVERE
Iron	ppm	ASTM D5185m	>1200	▲ 2134	▲ 1306	▲ 1823
Chromium	ppm	ASTM D5185m	>8	▲ 17	▲ 11	▲ 19
Silicon	ppm	ASTM D5185m	>230	▲ 311	▲ 168	▲ 217

Customer Id: NWWVAR
Sample No.: PCA0124362
Lab Number: 06174767
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

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

DIRT



08 Jan 2024 Diag: Sean Felton

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

[view report](#)



WEAR



26 May 2023 Diag: Don Baldrige

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. A sharp increase in the iron level is noted. Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The oil is no longer serviceable due to the presence of contaminants.

[view report](#)



NORMAL



15 Dec 2022 Diag: Don Baldrige

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

[view report](#)

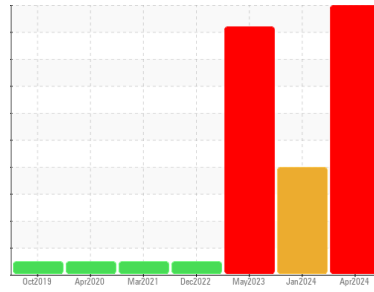


OIL ANALYSIS REPORT



Machine Id
DT641
Component
Rear Differential
Fluid
CHEVRON RPM SYNTHETIC GEAR 75W90 (3 mls)

Sample Rating Trend



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 advise that you inspect for the source(s) of wear. 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 as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0124362	PCA0111630	PCA0095247
Sample Date	Client Info		30 Apr 2024	08 Jan 2024	26 May 2023
Machine Age	mls	Client Info	95585	95585	95585
Oil Age	mls	Client Info	74721	74721	74721
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			SEVERE	ABNORMAL	SEVERE

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>.2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >1200	▲ 2134	▲ 1306	▲ 1823
Chromium	ppm	ASTM D5185m >8	▲ 17	▲ 11	▲ 19
Nickel	ppm	ASTM D5185m >20	<1	<1	3
Titanium	ppm	ASTM D5185m >4	4	2	4
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >30	● 61	● 40	● 64
Lead	ppm	ASTM D5185m >25	<1	<1	0
Copper	ppm	ASTM D5185m >50	3	3	3
Tin	ppm	ASTM D5185m >5	<1	<1	1
Vanadium	ppm	ASTM D5185m	0	<1	<1
Cadmium	ppm	ASTM D5185m	<1	<1	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	122	128	35
Barium	ppm	ASTM D5185m	5	5	8
Molybdenum	ppm	ASTM D5185m	7	8	1
Manganese	ppm	ASTM D5185m	25	15	22
Magnesium	ppm	ASTM D5185m	47	51	9
Calcium	ppm	ASTM D5185m	118	113	38
Phosphorus	ppm	ASTM D5185m	1035	1078	633
Zinc	ppm	ASTM D5185m	112	111	63
Sulfur	ppm	ASTM D5185m	21670	19875	20891

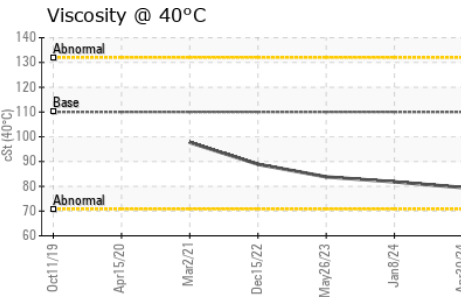
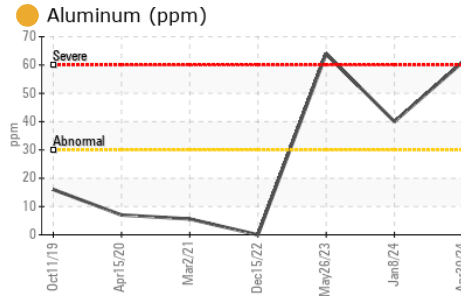
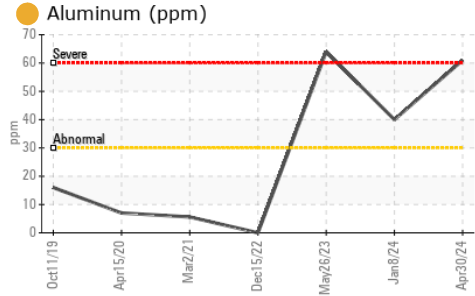
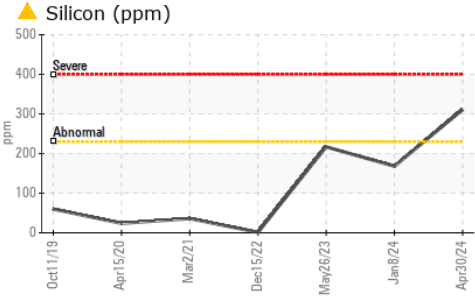
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >230	▲ 311	▲ 168	▲ 217
Sodium	ppm	ASTM D5185m	8	6	10
Potassium	ppm	ASTM D5185m >20	21	16	27

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	MODER	NONE	NONE
Debris	scalar	*Visual NONE	NONE	NONE	NONE
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

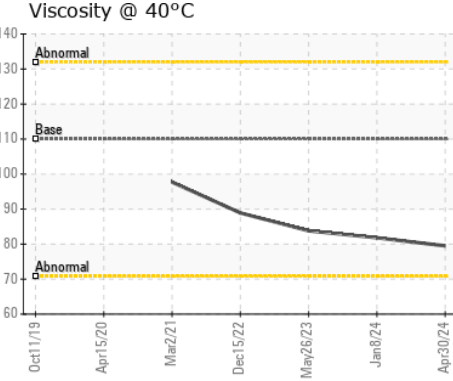
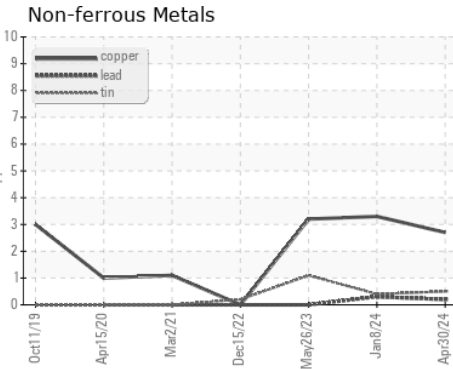
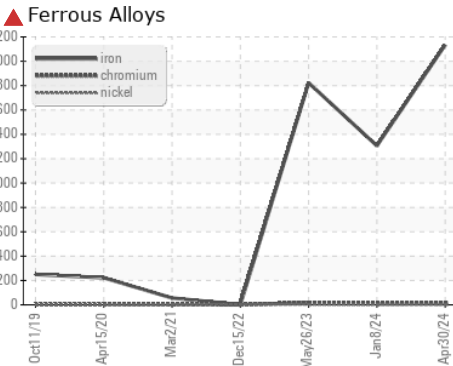
OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	110	79.5	81.8	83.8

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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0124362
Lab Number : 06174767
Unique Number : 11020820
Test Package : FLEET

Received : 09 May 2024
Tested : 10 May 2024
Diagnosed : 13 May 2024 - Sean Felton

NW WHITE & CO - BEAUFORT DIVISION
 1491 YENMASSEE HIGHWAY
 VARNVILLE, SC
 US 29944
 Contact: VINCENT BULLOCK
 bullockvince514@gmail.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)