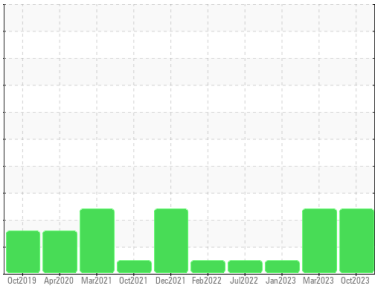
OIL DIAGNOSTICS

PROBLEM SUMMARY

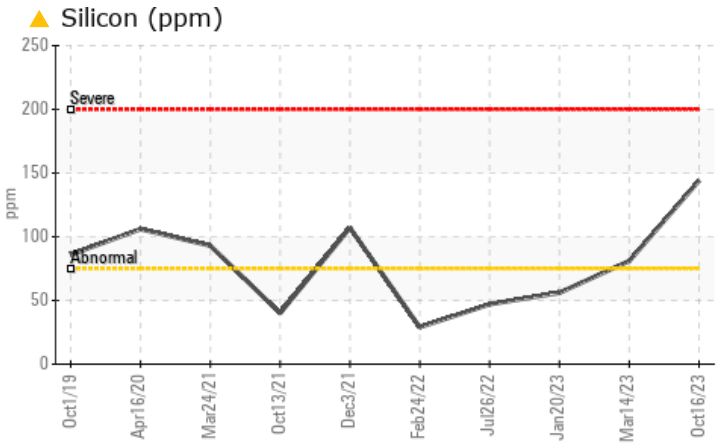
Sample Rating Trend

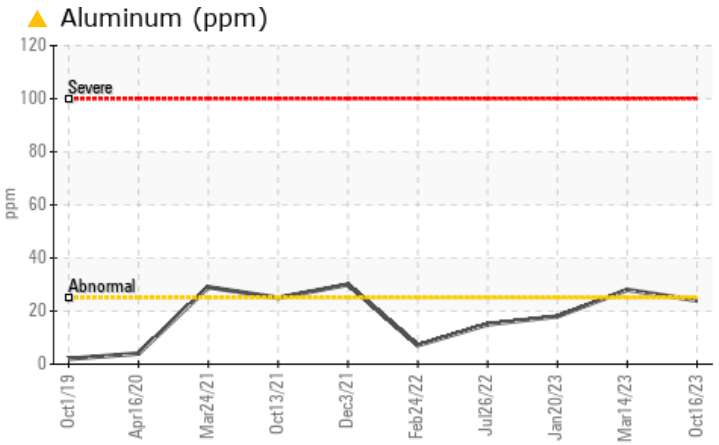


DIRT

Machine Id
DT643
Component
Front Differential
Fluid
CHEVRON RPM SYNTHETIC GEAR 75W90 (4 GAL)

COMPONENT CONDITION SUMMARY





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	NORMAL
Aluminum	ppm	ASTM D5185m	>25	▲ **24**	▲ 28	18
Silicon	ppm	ASTM D5185m	>75	▲ **144**	▲ 81	56

Customer Id: NWWCOL
Sample No.: PCA0107433
Lab Number: 05983274
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
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS

14 Mar 2023 Diag: Sean Felton

DIRT

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

20 Jan 2023 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

26 Jul 2022 Diag: Don Baldridge

NORMAL

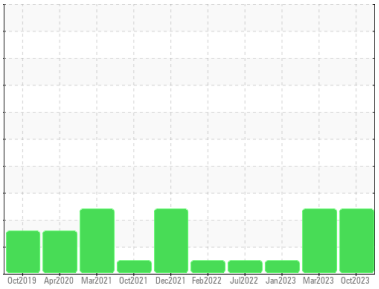
Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report

OIL ANALYSIS REPORT

OIL DIAGNOSTICS

Sample Rating Trend



DIRT

Machine Id
DT643
Component
Front Differential
Fluid
CHEVRON RPM SYNTHETIC GEAR 75W90 (4 GAL)

DIAGNOSIS

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

▲ Wear
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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PCA0107433**	PCA0092515	PCA0087447
Sample Date		Client Info		**16 Oct 2023**	14 Mar 2023	20 Jan 2023
Machine Age	mls	Client Info		**237542**	211985	211985
Oil Age	mls	Client Info		**0**	145156	0
Oil Changed		Client Info		**Not Changd**	Changed	Not Changd
Sample Status				**ABNORMAL**	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	**451**	267	153
Chromium	ppm	ASTM D5185m	>10	**4**	2	2
Nickel	ppm	ASTM D5185m	>10	**1**	<1	4
Titanium	ppm	ASTM D5185m		**1**	1	<1
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	▲ **24**	▲ 28	18
Lead	ppm	ASTM D5185m	>25	**0**	<1	<1
Copper	ppm	ASTM D5185m	>100	**21**	17	8
Tin	ppm	ASTM D5185m	>10	**<1**	<1	0
Vanadium	ppm	ASTM D5185m		**0**	0	<1
Cadmium	ppm	ASTM D5185m		**<1**	<1	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**231**	203	138
Barium	ppm	ASTM D5185m		**1**	0	1
Molybdenum	ppm	ASTM D5185m		**11**	6	5
Manganese	ppm	ASTM D5185m		**6**	5	4
Magnesium	ppm	ASTM D5185m		**124**	78	72
Calcium	ppm	ASTM D5185m		**216**	125	77
Phosphorus	ppm	ASTM D5185m		**1464**	1330	820
Zinc	ppm	ASTM D5185m		**207**	129	81
Sulfur	ppm	ASTM D5185m		**23203**	24265	14365

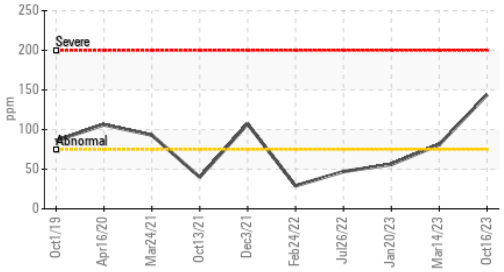
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	▲ **144**	▲ 81	56
Sodium	ppm	ASTM D5185m		**5**	3	14
Potassium	ppm	ASTM D5185m	>20	**8**	6	4

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	MODER	MODER
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	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

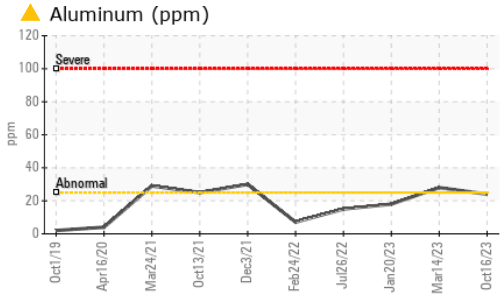
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	110	**84.2**	91.1	91.7

OIL ANALYSIS REPORT

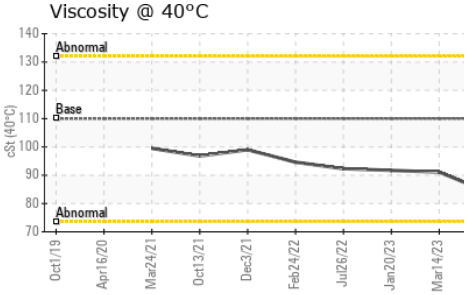
Silicon (ppm)



Aluminum (ppm)



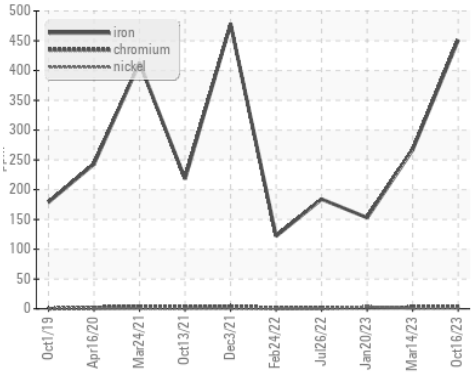
Viscosity @ 40°C



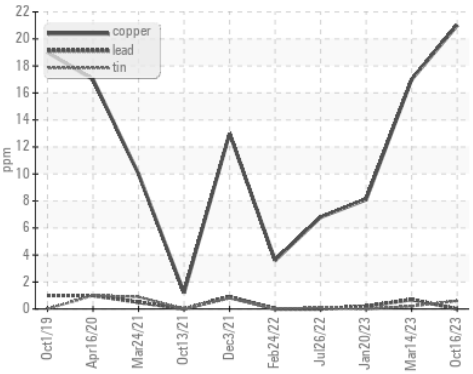
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			no image	no image	no image
Bottom			no image	no image	no image

GRAPHS

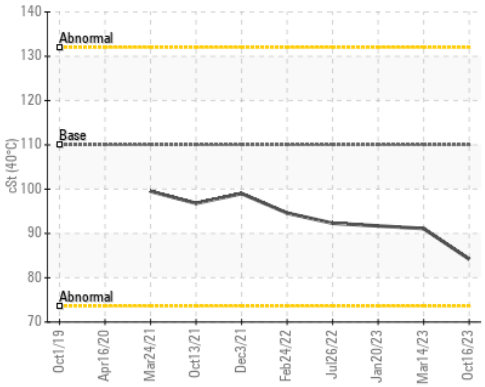
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0107433
Lab Number : 05983274
Unique Number : 10700569
Test Package : FLEET
Received : 18 Oct 2023
Diagnosed : 20 Oct 2023
Diagnostician : Sean Felton

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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100 INDEPENDENCE BLVD
COLUMBIA, SC
US 29210
Contact: GEORGE EDWARDS
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T:
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Report Id: NWWCOL [WUSCAR] 05983274 (Generated: 10/22/2023 19:57:01) Rev: 1

Submitted By: Paul Riddick