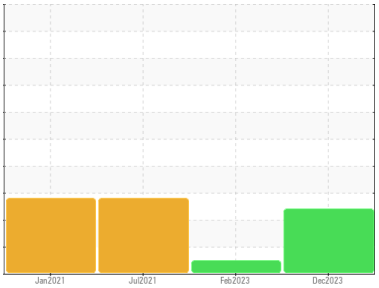
OIL DIAGNOSTICS

PROBLEM SUMMARY

Sample Rating Trend

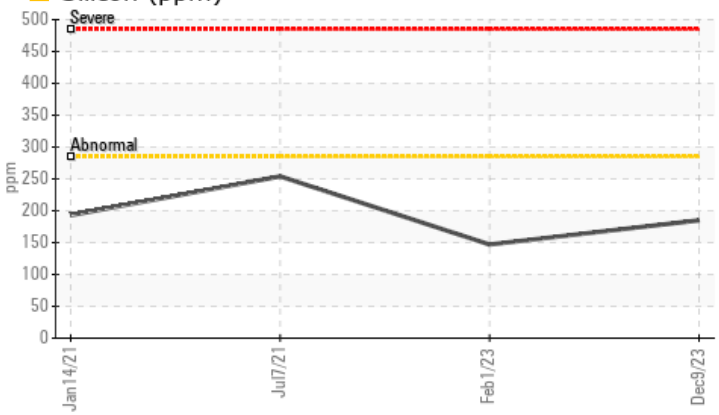


DIRT

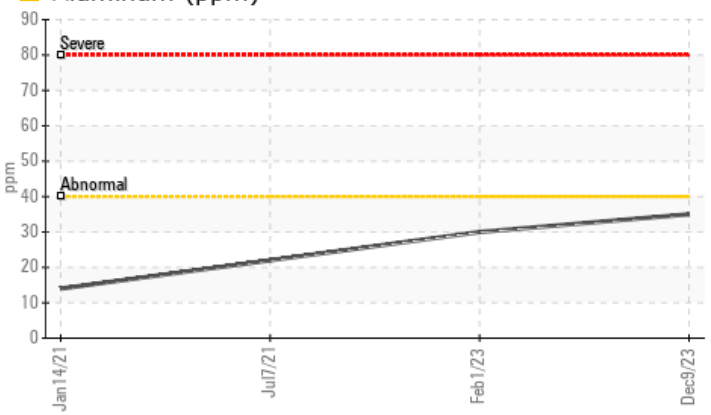
Machine Id
DT769
Component
Front Differential
Fluid
CHEVRON DELO SYNTHETIC GEAR 75W90 (--- QTS)

COMPONENT CONDITION SUMMARY

▲ Silicon (ppm)



▲ Aluminum (ppm)



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**	NORMAL	ABNORMAL
Aluminum	ppm	ASTM D5185m	>40	▲ **35**	30	▲ 22
Silicon	ppm	ASTM D5185m	>285	▲ **185**	147	▲ 254

Customer Id: NWWCOL
Sample No.: PCA0107502
Lab Number: 06032940
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

01 Feb 2023 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

07 Jul 2021 Diag: Don Baldridge

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. Moderate concentration of visible dirt/debris present in the oil. The condition of the oil is acceptable for the time in service.

view report

14 Jan 2021 Diag: Jonathan Hester

DIRT

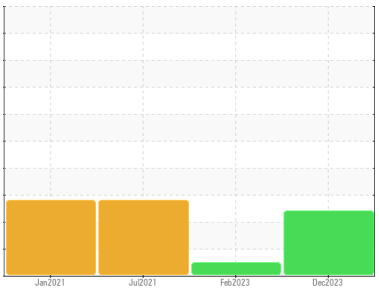
We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.All component wear rates are normal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. Moderate concentration of visible dirt/debris present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

view report

OIL ANALYSIS REPORT

OIL DIAGNOSTICS

Sample Rating Trend



DIRT

Machine Id
DT769
Component
Front Differential
Fluid
CHEVRON DELO SYNTHETIC GEAR 75W90 (--- QTS)

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		**PCA0107502**	PCA0090307	PCA0052646
Sample Date		Client Info		**09 Dec 2023**	01 Feb 2023	07 Jul 2021
Machine Age	mls	Client Info		**150003**	150003	49555
Oil Age	mls	Client Info		**150003**	150003	0
Oil Changed		Client Info		**Not Changd**	N/A	Not Changd
Sample Status				**ABNORMAL**	NORMAL	ABNORMAL

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	>870	**218**	170	178
Chromium	ppm	ASTM D5185m	>8	**1**	1	1
Nickel	ppm	ASTM D5185m	>25	**8**	8	8
Titanium	ppm	ASTM D5185m	>4	**<1**	<1	<1
Silver	ppm	ASTM D5185m		**0**	0	<1
Aluminum	ppm	ASTM D5185m	>40	▲ **35**	30	▲ 22
Lead	ppm	ASTM D5185m	>25	**0**	<1	0
Copper	ppm	ASTM D5185m	>60	**<1**	<1	1
Tin	ppm	ASTM D5185m	>5	**0**	0	0
Antimony	ppm	ASTM D5185m	>5	**---**	---	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

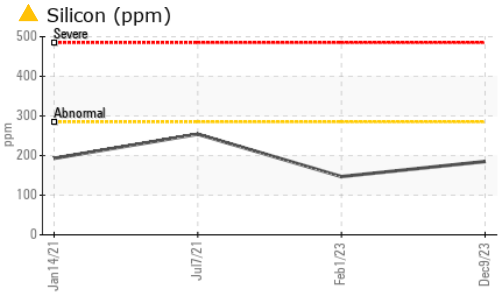
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**200**	229	252
Barium	ppm	ASTM D5185m		**0**	0	2
Molybdenum	ppm	ASTM D5185m		**6**	6	<1
Manganese	ppm	ASTM D5185m		**3**	2	4
Magnesium	ppm	ASTM D5185m		**88**	69	1
Calcium	ppm	ASTM D5185m		**116**	106	21
Phosphorus	ppm	ASTM D5185m		**1416**	1311	1403
Zinc	ppm	ASTM D5185m		**108**	104	<1
Sulfur	ppm	ASTM D5185m		**22819**	25056	22003

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>285	▲ **185**	147	▲ 254
Sodium	ppm	ASTM D5185m		**3**	4	7
Potassium	ppm	ASTM D5185m	>20	**<1**	2	2

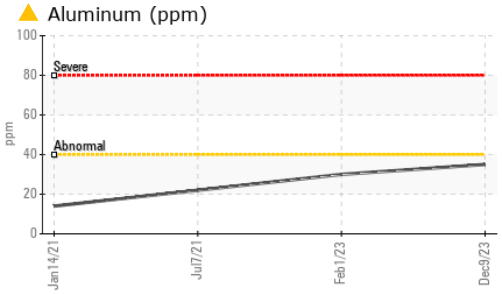
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	LIGHT	▲ MODER
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

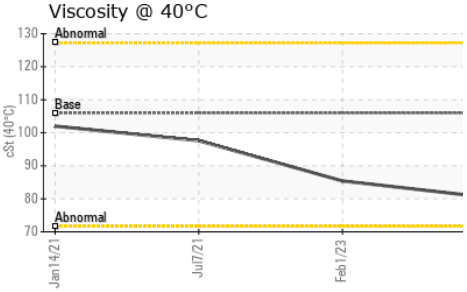
Silicon (ppm)



Aluminum (ppm)



Viscosity @ 40°C

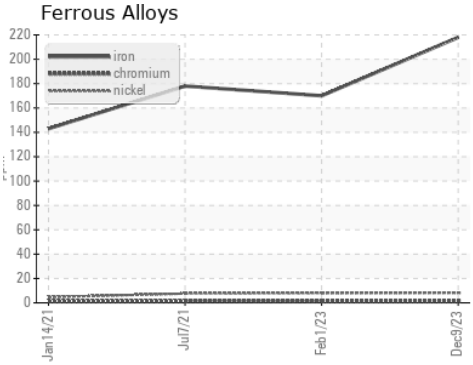


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	106	**80.5**	85.4	97.6

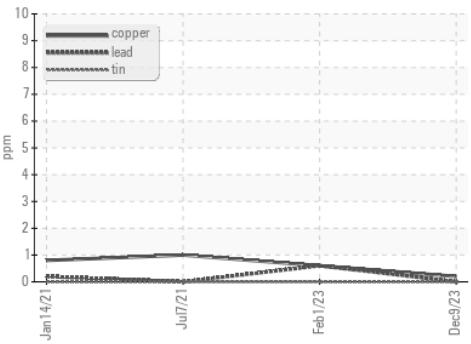
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			*no image*	*no image*	*no image*
Bottom			*no image*	*no image*	*no image*

GRAPHS

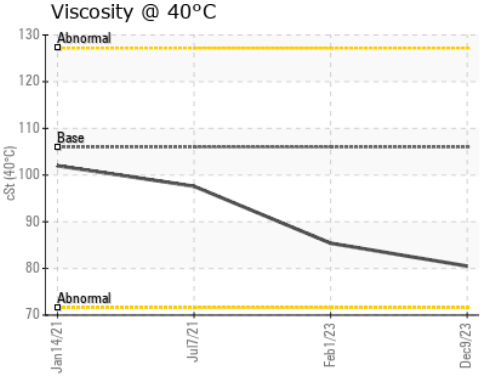
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0107502
Lab Number : 06032940
Unique Number : 10782731
Test Package : FLEET
Received : 12 Dec 2023
Diagnosed : 15 Dec 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)

NW WHITE & CO - COLUMBIA DIVISION
100 INDEPENDENCE BLVD
COLUMBIA, SC
US 29210
Contact: GEORGE EDWARDS
gedwards@nwwhite.com
T:
F: