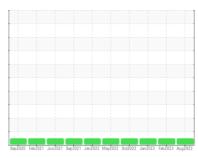


## **OIL ANALYSIS REPORT**

Sample Rating Trend





# T278

Component Differen

**Rear Differential** 

CHEVRON DELO SYNTHETIC GEAR 75W90 (--- QTS)

## DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil

### **Fluid Condition**

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

| 0 ( QTS)         |        | Sep2020 Feb2 | 021 Jun2021 Sep2021 Jan2 | 022 May2022 Oct2022 Jan2023 Feb2 | 023 Aug <sup>2</sup> 023 |             |
|------------------|--------|--------------|--------------------------|----------------------------------|--------------------------|-------------|
| SAMPLE INFOR     | MATION | method       | limit/base               | current                          | history1                 | history2    |
| Sample Number    |        | Client Info  |                          | PCA0100057                       | PCA0090367               | PCA0090304  |
| Sample Date      |        | Client Info  |                          | 02 Aug 2023                      | 07 Feb 2023              | 31 Jan 2023 |
| Machine Age      | mls    | Client Info  |                          | 254868                           | 277334                   | 277334      |
| Oil Age          | mls    | Client Info  |                          | 0                                | 277334                   | 0           |
| Oil Changed      |        | Client Info  |                          | Not Changd                       | N/A                      | Changed     |
| Sample Status    |        |              |                          | NORMAL                           | NORMAL                   | NORMAL      |
| WEAR METAL       | .S     | method       | limit/base               | current                          | history1                 | history2    |
| Iron             | ppm    | ASTM D5185m  | >500                     | 46                               | 14                       | 57          |
| Chromium         | ppm    | ASTM D5185m  | >10                      | <1                               | 0                        | <1          |
| Nickel           | ppm    | ASTM D5185m  | >10                      | 0                                | 0                        | 0           |
| Titanium         | ppm    | ASTM D5185m  |                          | 0                                | 0                        | 0           |
| Silver           | ppm    | ASTM D5185m  |                          | 0                                | 0                        | 0           |
| Aluminum         | ppm    | ASTM D5185m  | >25                      | <1                               | 0                        | 1           |
| Lead             | ppm    | ASTM D5185m  | >25                      | 0                                | 0                        | 0           |
| Copper           | ppm    | ASTM D5185m  | >100                     | <1                               | 0                        | <1          |
| Tin              | ppm    | ASTM D5185m  | >10                      | 0                                | 0                        | 0           |
| Vanadium         | ppm    | ASTM D5185m  |                          | 0                                | 0                        | 0           |
| Cadmium          | ppm    | ASTM D5185m  |                          | 0                                | 0                        | 0           |
| ADDITIVES        | PP     | method       | limit/base               | current                          | history1                 | history2    |
| Boron            | ppm    | ASTM D5185m  | mmbasc                   | 246                              | 268                      | 244         |
| Barium           | ppm    | ASTM D5185m  |                          | <1                               | 0                        | 0           |
| Molybdenum       | ppm    | ASTM D5185m  |                          | 10                               | 10                       | 5           |
| Manganese        | ppm    | ASTM D5185m  |                          | 1                                | <1                       | 2           |
| Magnesium        | ppm    | ASTM D5185m  |                          | 102                              | 96                       | 67          |
| Calcium          | ppm    | ASTM D5185m  |                          | 190                              | 186                      | 86          |
| Phosphorus       |        | ASTM D5185m  |                          | 1352                             | 1298                     | 1287        |
| Zinc             | ppm    | ASTM D5185m  |                          | 168                              | 160                      | 90          |
| Sulfur           | ppm    | ASTM D5185m  |                          | 24489                            | 19905                    | 25144       |
|                  | ppm    |              | lii+/l                   |                                  |                          |             |
| CONTAMINAN       |        | method       | limit/base               | current                          | history1                 | history2    |
| Silicon          | ppm    | ASTM D5185m  | >/5                      | 10                               | 5                        | 12          |
| Sodium           | ppm    | ASTM D5185m  | 00                       | 0                                | 0                        | 0           |
| Potassium        | ppm    | ASTM D5185m  | •                        | <1                               | <1                       | 0           |
| 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                     | LIGHT                            | 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 PROPE      | RTIES  | method       | limit/base               | current                          | history1                 | history2    |

Visc @ 40°C

cSt

ASTM D445 106

86.5

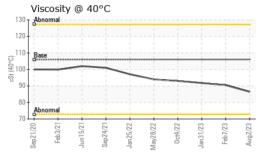
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90.5 91.8 Submitted By: Paul Riddick

Report Id: NWWCOL [WUSCAR] 05925677 (Generated: 08/17/2023 12:13:54) Rev: 1

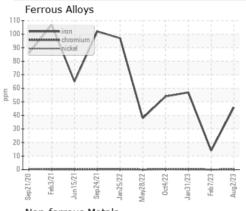


## **OIL ANALYSIS REPORT**

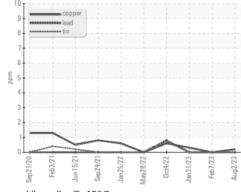


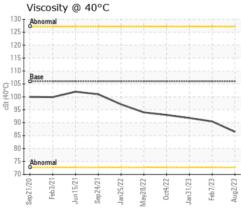
| SAM    | IPLE IMAGES | method | limit/base | current  | history1 | history2 |
|--------|-------------|--------|------------|----------|----------|----------|
| Color  |             |        |            | no image | no image | no image |
| Bottom |             |        |            | no image | no image | no image |

#### **GRAPHS**



#### Non-ferrous Metals









Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10605624 Test Package : FLEET

: PCA0100057 : 05925677

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 15 Aug 2023 Diagnosed : 17 Aug 2023 Diagnostician : Jonathan Hester

NW WHITE & CO - COLUMBIA DIVISION

100 INDEPENDENCE BLVD COLUMBIA, SC US 29210

Contact: GEORGE EDWARDS

gedwards@nwwhite.com

T:

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)

Report Id: NWWCOL [WUSCAR] 05925677 (Generated: 08/17/2023 12:13:54) Rev: 1

Submitted By: Paul Riddick