

## Machine Id 857-5112 Component Diesel Engine Fluid CHEVRON DELO 400 SAE 10W30 (--- GAL)

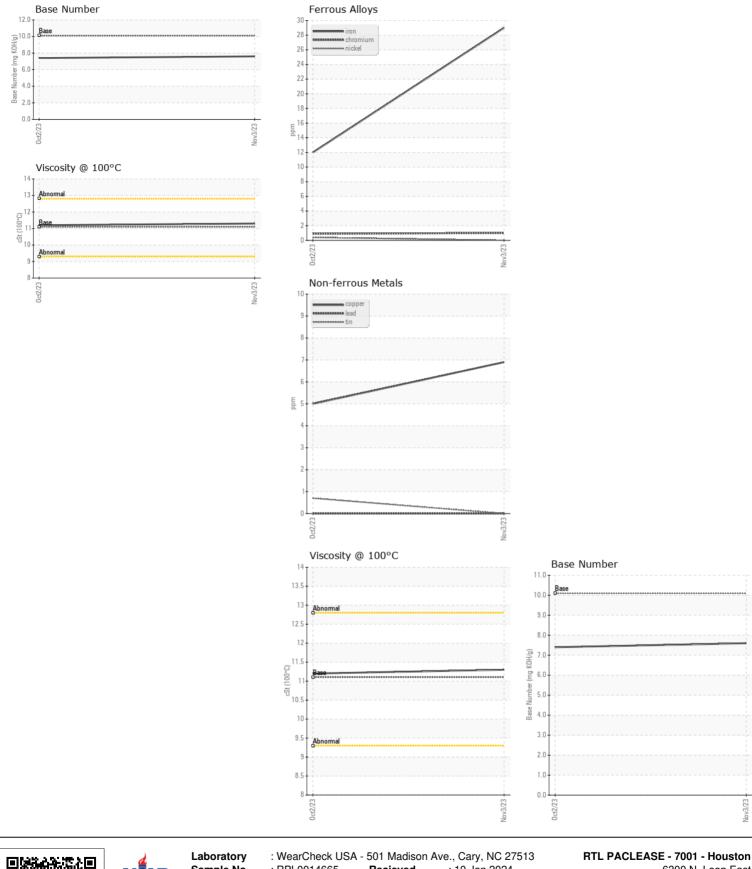
| RECOMMENDATION  | Test               | UOM              | Method             | Limit/Abn  | Current      | History1     | History2 |
|---|--------------------|------------------|--------------------|------------|--------------|--------------|----------|
| Resample at the next service interval to monitor.   | Sample Number      |                  | Client Info        |            | RPL0014665   | RPL0010969   |          |
|   | Sample Date        |                  | Client Info        |            | 03 Nov 2023  | 02 Oct 2023  |          |
|   | Machine Age        | hrs              | Client Info        |            | 1107         | 972          |          |
|   | Oil Age            | hrs              | Client Info        |            | 0            | 0            |          |
|   | Filter Age         | hrs              | Client Info        |            | 0            | 0            |          |
|   | Oil Changed        |                  | Client Info        |            | Changed      | N/A          |          |
|   | Filter Changed     |                  | Client Info        |            | Changed      | N/A          |          |
|   | Sample Status      |                  |                    |            | NORMAL       | NORMAL       |          |
| WEAR<br>All component wear rates are normal.  | Iron               | ppm              | ASTM D5185m        | >100       | 29           | 12           |          |
|   | Chromium           | ppm              | ASTM D5185m        | >20        | 1            | <1           |          |
|   | Nickel             | ppm              | ASTM D5185m        |            | 0            | <1           |          |
|   | Titanium           | ppm              | ASTM D5185m        |            | 0            | 0            |          |
|   | Silver             | ppm              | ASTM D5185m        | >3         | 0            | <1           |          |
|   | Aluminum           | ppm              | ASTM D5185m        |            | 6            | 5            |          |
|   | Lead               | ppm              | ASTM D5185m        |            | 0            | 0            |          |
|   | Copper             | ppm              | ASTM D5185m        |            | 7            | 5            |          |
|   | Tin                | ppm              | ASTM D5185m        |            | 0            | <1           |          |
|   | Vanadium           | ppm              | ASTM D5185m        |            | 0            | <1           |          |
|   | White Metal        | scalar           | *Visual            | NONE       | NONE         | NONE         |          |
|   | Yellow Metal       | scalar           | *Visual            | NONE       | NONE         | NONE         |          |
| CONTAMINATION   |                    |                  |                    |            |              |              |          |
|   | Silicon            | ppm              | ASTM D5185m        |            | 11           | 8            |          |
| There is no indication of any contamination in the oil.   | Potassium          | ppm              | ASTM D5185m        |            | 15           | 12           |          |
|   | Fuel               |                  | WC Method          |            | <1.0         | <1.0         |          |
|   | Water              |                  | WC Method          | >0.2       | NEG          | NEG          |          |
|   | Glycol             | 0/               | WC Method          | 0          | NEG          | NEG          |          |
|   | Soot %             | %                | *ASTM D7844        |            | 0.2          | 0.1          |          |
|   | Nitration          | Abs/cm           | *ASTM D7624        | >20        | 10.6         | 9.6          |          |
|   | Sulfation          | Abs/.1mm         | *ASTM D7415        |            | 22.5         | 21.9         |          |
|   | Silt               | scalar           | *Visual            | NONE       | NONE         | NONE         |          |
|   | Debris             | scalar           | *Visual            | NONE       | NONE         | NONE         |          |
|   | Sand/Dirt          | scalar           | *Visual            | NONE       | NONE         | NONE         |          |
|   | Appearance<br>Odor | scalar           | *Visual<br>*Visual | NORML      | NORML        | NORML        |          |
|   | Emulsified Water   | scalar<br>scalar | *Visual            | NORML >0.2 | NORML<br>NEG | NORML<br>NEG |          |
| FLUID CONDITION<br>The BN result indicates that there is suitable alkalinity remaining in the<br>oil. The condition of the oil is suitable for further service. |                    |                  | 10000              | 20.L       |              |              |          |
|   | Sodium             | ppm              | ASTM D5185m        |            | <1           | 2            |          |
|   | Boron              | ppm              | ASTM D5185m        |            | 25           | 28           |          |
|   | Barium             | ppm              | ASTM D5185m        |            | 0            | <1           |          |
|   | Molybdenum         | ppm              | ASTM D5185m        |            | 45           | 42           |          |
|   | Manganese          | ppm              | ASTM D5185m        |            | 0            | <1           |          |
|   | Magnesium          | ppm              | ASTM D5185m        |            | 557          | 542          |          |
|   | Calcium            | ppm              | ASTM D5185m        |            | 1705         | 1591         |          |
|   | Phosphorus         | ppm              | ASTM D5185m        | 1260       | 788          | 782          |          |
|   | Zinc               | ppm              | ASTM D5185m        | 1400       | 947          | 918          |          |
|   | Sulfur             | ppm              | ASTM D5185m        |            | 2579         | 2477         |          |
|   | Oxidation          | Abs/.1mm         | *ASTM D7414        | >25        | 22.7         | 22.2         |          |
|   | Base Number (BN)   | mg KOH/g         | ASTM D2896         | 10.1       | 7.6          | 7.4          |          |
|   |                    | 0.               | AOTH D 445         |            |              | 110          |          |

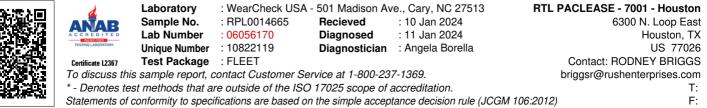
Visc @ 100°C cSt

ASTM D445 11.1

11.2

11.3





Contact/Location: RODNEY BRIGGS - PAC7001