

## Machine Id **128015-1066** Component **Diesel Engine** Fluid **CHEVRON DELO 400 XLE 15W40 (--- GAL)**

|   | T 4                       |          |                            |           |                           |          | L l'ata a O |
|---|---------------------------|----------|----------------------------|-----------|---------------------------|----------|-------------|
| RECOMMENDATION  | Test                      | UOM      | Method                     | Limit/Abn | Current                   | History1 | History2    |
| Resample at the next service interval to monitor.   | Sample Number             |          | Client Info                |           | GFL0099629<br>12 Feb 2024 |          |             |
|   | Sample Date               | bro      | Client Info                |           |                           |          |             |
|   | Machine Age               | hrs      | Client Info                |           | 4718<br>600               |          |             |
|   | Oil Age                   | hrs      | Client Info                |           | 600                       |          |             |
|   | Filter Age<br>Oil Changed | hrs      | Client Info<br>Client Info |           |                           |          |             |
|   | -                         |          |                            |           | Changed                   |          |             |
|   | Filter Changed            |          | Client Info                |           | Changed<br>NORMAL         |          |             |
|   | Sample Status             |          |                            |           |                           |          |             |
| WEAR<br>All component wear rates are normal.  | Iron                      | ppm      | ASTM D5185m                | >110      | 32                        |          |             |
|   | Chromium                  | ppm      | ASTM D5185m                | >4        | 2                         |          |             |
|   | Nickel                    | ppm      | ASTM D5185m                |           | <1                        |          |             |
|   | Titanium                  | ppm      | ASTM D5185m                |           | <1                        |          |             |
|   | Silver                    | ppm      | ASTM D5185m                | >2        | 0                         |          |             |
|   | Aluminum                  | ppm      | ASTM D5185m                |           | 5                         |          |             |
|   | Lead                      | ppm      | ASTM D5185m                |           | 1                         |          |             |
|   | Copper                    | ppm      | ASTM D5185m                |           | 4                         |          |             |
|   | Tin                       | ppm      | ASTM D5185m                |           | <1                        |          |             |
|   | Vanadium                  | ppm      | ASTM D5185m                |           | <1                        |          |             |
|   | White Metal               | scalar   | *Visual                    | NONE      | NONE                      |          |             |
|   | Yellow Metal              | scalar   | *Visual                    | NONE      | NONE                      |          |             |
|   |                           |          |                            |           |                           |          |             |
| CONTAMINATION   | Silicon                   | ppm      | ASTM D5185m                | >30       | 4                         |          |             |
| There is no indication of any contamination in the oil.   | Potassium                 | ppm      | ASTM D5185m                | >20       | 4                         |          |             |
|   | Fuel                      |          | WC Method                  | >5        | <1.0                      |          |             |
|   | Water                     |          | WC Method                  | >0.2      | NEG                       |          |             |
|   | Glycol                    |          | WC Method                  |           | NEG                       |          |             |
|   | Soot %                    | %        | *ASTM D7844                | >3        | 0.4                       |          |             |
|   | Nitration                 | Abs/cm   | *ASTM D7624                | >20       | 10.8                      |          |             |
|   | Sulfation                 | Abs/.1mm | *ASTM D7415                | >30       | 21.0                      |          |             |
|   | Silt                      | scalar   | *Visual                    | NONE      | NONE                      |          |             |
|   | Debris                    | scalar   | *Visual                    | NONE      | NONE                      |          |             |
|   | Sand/Dirt                 | scalar   | *Visual                    | NONE      | NONE                      |          |             |
|   | Appearance                | scalar   | *Visual                    | NORML     | NORML                     |          |             |
|   | Odor                      | scalar   | *Visual                    | NORML     | NORML                     |          |             |
|   | Emulsified Water          | scalar   | *Visual                    | >0.2      | NEG                       |          |             |
| FLUID CONDITION   | o "                       |          |                            |           |                           |          |             |
|   | Sodium                    | ppm      | ASTM D5185m                |           | <1                        |          |             |
| The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service. | Boron                     | ppm      | ASTM D5185m                |           | 7                         |          |             |
|   | Barium                    | ppm      | ASTM D5185m                |           | 0                         |          |             |
|   | Molybdenum                | ppm      | ASTM D5185m                |           | 61                        |          |             |
|   | Manganese                 | ppm      | ASTM D5185m                |           | <1                        |          |             |
|   | Magnesium                 | ppm      | ASTM D5185m                |           | 915                       |          |             |
|   | Calcium                   | ppm      | ASTM D5185m                | 700       | 1256                      |          |             |
|   | Phosphorus                | ppm      | ASTM D5185m                |           | 1027                      |          |             |
|   | Zinc                      | ppm      | ASTM D5185m                |           | 1248                      |          |             |
|   | Sulfur                    | ppm      | ASTM D5185m                |           | 3012                      |          |             |
|   | Oxidation                 | Abs/.1mm | *ASTM D7414                |           | 18.0                      |          |             |
|   | Base Number (BN)          | mg KOH/g | ASTM D2896                 | 10.7      | 6.3                       |          |             |
|   |                           | - 04     |                            | 110       | 40.0                      |          |             |

Visc @ 100°C cSt ASTM D445 14.9

13.6



