|  |  |  |  |  |  | NORMAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | NORMAL |  |
|  |  |  |  |  |  | NORMAL |  |
| $\begin{aligned} & \text { Machine Id } \\ & \mathbf{8 5 7 - 3 6 3 1} \end{aligned}$ |  |  |  |  |  |  |  |
| Component Engine |  |  |  |  |  |  |  |
| CHEVRON DELO 400 SAE 10 W 30 (--- GAL) |  |  |  |  |  |  |  |
| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| Resample at the next service interval to monitor. | Sample Number |  | Client Info |  | RPL0013984 | RPL0010374 | RPL0010662 |
|  | Sample Date |  | Client Info |  | 22 Dec 2023 | 30 Jun 2023 | 07 Mar 2023 |
|  | Machine Age | hrs | Client Info |  | 16593 | 15904 | 14385 |
|  | Oil Age | hrs | Client Info |  | 0 | 0 | 0 |
|  | Filter Age | hrs | Client Info |  | 0 | 0 | 0 |
|  | Oil Changed |  | Client Info |  | Not Changd | Not Changd | Not Changd |
|  | Filter Changed |  | Client Info |  | Not Changd | Not Changd | Not Changd |
|  | Sample Status |  |  |  | NORMAL | NORMAL | NORMAL |
| WEAR | Iron | ppm | ASTM D5185m | >100 | 16 | 33 | 25 |
| All component wear rates are normal. | Chromium | ppm | ASTM D5185m | >20 | <1 | 1 | 1 |
|  | Nickel | ppm | ASTM D5185m | >4 | 0 | 0 | 0 |
|  | Titanium | ppm | ASTM D5185m |  | 0 | <1 | 0 |
|  | Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
|  | Aluminum | ppm | ASTM D5185m | >20 | 2 | 1 | 16 |
|  | Lead | ppm | ASTM D5185m | >40 | 0 | 3 | 0 |
|  | Copper | ppm | ASTM D5185m | >330 | <1 | $<1$ | $<1$ |
|  | Tin | ppm | ASTM D5185m | >15 | 0 | <1 | <1 |
|  | Vanadium | ppm | ASTM D5185m |  | 0 | 0 | 0 |
|  | White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
|  | Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | >25 | 6 | 7 | 8 |
| There is no indication of any contamination in the oil. | Potassium | ppm | ASTM D5185m | >20 | 5 | 22 | 48 |
|  | Fuel |  | WC Method | >5 | <1.0 | $<1.0$ | <1.0 |
|  | Water |  | WC Method | $>0.2$ | NEG | NEG | NEG |
|  | Glycol |  | WC Method |  | NEG | NEG | NEG |
|  | Soot \% | \% | *ASTM D7844 | >3 | 0.3 | 0.4 | 0.3 |
|  | Nitration | Abs/cm | *ASTM D7624 | >20 | 9.5 | 13.2 | 9.1 |
|  | Sulfation | Abs. 1 mm | *ASTM D7415 | >30 | 25.0 | 29.2 | 19.6 |
|  | 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 | >0.2 | NEG | NEG | NEG |
| FLUID CONDITION | Sodium | ppm | ASTM D5185m |  | 2 | 8 | 4 |
| 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 |  | 55 | 27 | 51 |
|  | Barium | ppm | ASTM D5185m |  | 0 | 0 | 0 |
|  | Molybdenum | ppm | ASTM D5185m |  | 42 | 13 | 11 |
|  | Manganese | ppm | ASTM D5185m |  | 0 | <1 | <1 |
|  | Magnesium | ppm | ASTM D5185m |  | 554 | 741 | 712 |
|  | Calcium | ppm | ASTM D5185m |  | 1677 | 1521 | 1365 |
|  | Phosphorus | ppm | ASTM D5185m | 1260 | 766 | 734 | 680 |
|  | Zinc | ppm | ASTM D5185m | 1400 | 955 | 876 | 838 |
|  | Sulfur | ppm | ASTM D5185m |  | 2399 | 3587 | 3177 |
|  | Oxidation | Abs/. 1 mm | *ASTM D7414 | >25 | 26.1 | 31.8 | 14.4 |
|  | Base Number (BN) | mg KOHIg | ASTM D2896 | 10.1 | 8.1 | 3.7 | 7.0 |
|  | Visc @ $100^{\circ} \mathrm{C}$ | cSt | ASTM D445 | 11.1 | 10.8 | 10.7 | 11.1 |



Certificate 12367 Laboratory Sample No. Lab Number Unique Number
: WearCheck USA - 501 Madison Ave., Cary, NC 27513
: RPL0013984 Recieved : 10 Jan 2024 06056218 . 10822167 Diagnosed Diagnostician : Angela Borella

