

NORMAL WEAR CONTAMINATION NORMAL **FLUID CONDITION** NORMAL

Machine Id 410015 Component **Diesel Engine** PETRO CANADA DURON SHP 15W40 (--- GAL)

| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|---|-------------------------|------------------------|--------------------------------|-----------|---------------------|----------|----------|
| Resample at the next service interval to monitor. | Sample Number | | Client Info | | GFL0044430 | | |
| | Sample Date | | Client Info | | 15 Mar 2024 | | |
| | Machine Age | hrs | Client Info | | 5683 | | |
| | Oil Age | hrs | Client Info | | 116 | | |
| | Filter Age | hrs | Client Info | | 116 | | |
| | Oil Changed | | Client Info | | Changed | | |
| | Filter Changed | | Client Info | | Changed | | |
| | Sample Status | | | | NORMAL | | |
| WEAR | Iron | ppm | ASTM D5185(m) | <120 | 9 | | |
| WEAN | Chromium | ppm | ASTM D5185(m) | | 0 | | |
| All component wear rates are normal. | Nickel | | | >15 | ہ <1 | | |
| | Titanium | ppm | ASTM D5185(m) | | 0 | | |
| | Silver | ppm | ASTM D5185(m) ASTM D5185(m) | | 0 | | |
| | Aluminum | ppm | 1 7 | | 2 | | |
| | Lead | ppm | ASTM D5185(m) | | 2 | | |
| | Copper | ppm | ASTM D5185(m) ASTM D5185(m) | >40 | 2 | | |
| | Copper Tin | ppm | · · · · | >330 | 2 | | |
| | | ppm | ASTM D5185(m) | 213 | 0 | | |
| | Vanadium White Metal | ppm | ASTM D5185(m) | NONE | VLITE | | |
| | Yellow Metal | scalar | Visual* Visual* | NONE | NONE | | |
| | | scalar | visual | INUNE | | | |
| CONTAMINATION | Silicon | ppm | ASTM D5185(m) | >25 | 2 | | |
| | Potassium | ppm | ASTM D5185(m) | | 2 | | |
| There is no indication of any contamination in the oil. | Fuel | PP.11 | WC Method | >3.0 | <1.0 | | |
| | Water | | WC Method | | NEG | | |
| | Glycol | | WC Method | 20.L | NEG | | |
| | Soot % | % | ASTM D7844* | >4 | 0 | | |
| | Nitration | Abs/cm | ASTM D7624* | >20 | 6.2 | | |
| | Sulfation | Abs/.1mm | ASTM D7024 ASTM D7415* | | 18.6 | | |
| | 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 | | Visual* | >0.2 | NEG | | |
| | | Scalai | visual | 20.2 | NEG | | |
| LUID CONDITION | Sodium | ppm | ASTM D5185(m) | | 3 | | |
| | Boron | ppm | ASTM D5185(m) | 0 | 6 | | |
| The condition of the oil is acceptable for the time in service. | Barium | ppm | ASTM D5185(m) | | 0 | | |
| | Molybdenum | ppm | ASTM D5185(m) | | 54 | | |
| | Manganese | ppm | ASTM D5185(m) | | <1 | | |
| | Magnesium | ppm | ASTM D5185(m) | | 909 | | |
| | Calcium | ppm | | 1070 | 1071 | | |
| | Phosphorus | ppm | ASTM D5185(m) | | 937 | | |
| | Zinc | ppm | ASTM D5185(m) | | 1136 | | |
| | Sulfur | ppm | ASTM D5185(m) | | 2499 | | |
| | | | | | | | |
| | | Ahs/ 1mm | ASTM11/414* | >/2 | 14 n | | |
| | Oxidation | Abs/.1mm | | | 14.6 102 | | |
| | | Abs/.1mm cSt cSt | ASTM D7279(m) | | 14.6 102 13.9 | | |



