OIL ANALYSIS REPORT


## 810043

## Transmission (Auto)

PETRO CANADA DuraDrive HD Synthetic 668 (--- GAL)

## 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 fluid.

Fluid Condition
The condition of the fluid is acceptable for the time in service.

| SAMPLE INFORMATION |  | method | limitbase | current | history1 | history2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sample Number |  | Client Info |  | GFL0091406 | GFL0086142 | GFL0083201 |
| Sample Date |  | Client Info |  | 05 Sep 2023 | 25 Jul 2023 | 21 Jun 2023 |
| Machine Age | hrs | Client Info |  | 8761 | 8634 | 8472 |
| Oil Age | hrs | Client Info |  | 425 | 1409 | 1247 |
| Oil Changed |  | Client Info |  | Not Changd | Not Changd | Not Changd |
| Sample Status |  |  |  | NORMAL | NORMAL | NORMAL |
| WEAR METAL |  | method | limitbase | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >230 | 126 | 131 | 130 |
| Chromium | ppm | ASTM D5185m | >2 | 0 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >5 | <1 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >5 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >65 | 64 | 73 | 70 |
| Lead | ppm | ASTM D5185m | >55 | 31 | 34 | 35 |
| Copper | ppm | ASTM D5185m | >85 | 40 | 42 | 40 |
| Tin | ppm | ASTM D5185m | >5 | 9 | 10 | 10 |
| Vanadium | ppm | ASTM D5185m |  | <1 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m |  | 0 | 0 | 0 |


| ADDITIVES |  | method | limit/base | current | history1 | history2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Boron | ppm | ASTM D5185m |  | 66 | 74 | 74 |
| Barium | ppm | ASTM D5185m |  | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m |  | <1 | <1 | <1 |
| Manganese | ppm | ASTM D5185m |  | 2 | 2 | 2 |
| Magnesium | ppm | ASTM D5185m |  | 0 | 0 | 0 |
| Calcium | ppm | ASTM D5185m |  | 65 | 72 | 71 |
| Phosphorus | ppm | ASTM D5185m |  | 230 | 254 | 255 |
| Zinc | ppm | ASTM D5185m |  | 0 | 2 | 0 |
| Sulfur | ppm | ASTM D5185m |  | 910 | 1058 | 994 |
| CONTAMINANT |  | method | limit/base | current | history 1 | history2 |
| Silicon | ppm | ASTM D5185m | >20 | 8 | 8 | 7 |
| Sodium | ppm | ASTM D5185m |  | 10 | 10 | 9 |
| Potassium | ppm | ASTM D5185m | >20 | 6 | 4 | 6 |


| VISUAL |  | method | limitbase | 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 | 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 | >0.1 | NEG | NEG | NEG |
| Free Water | scalar | *Visual |  | NEG | NEG | NEG |
| FLUID PROPERTIES |  | method | limitbase | current | history1 | history2 |
| Visc @ $40^{\circ} \mathrm{C}$ | cSt | ASTM D445 | 34 | 33.9 | 34.5 | 34.7 |

## OIL ANALYSIS REPORT



| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Color |  |  | no image | no image | no image |
| Bottom |  |  | no image | no image | no image |
| GRAPHS |  |  |  |  |  |




Viscosity @ $40^{\circ} \mathrm{C}$


