## OIL ANALYSIS REPORT



## (EEY356)

10651
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 |  | GFL0115739 | GFL0112324 | GFL0109960 |
| Sample Date |  | Client Info |  | 04 Apr 2024 | 13 Feb 2024 | 09 Feb 2024 |
| Machine Age | hrs | Client Info |  | 21493 | 21222 | 21191 |
| Oil Age | hrs | Client Info |  | 271 | 1088 | 1057 |
| Oil Changed |  | Client Info |  | Changed | Not Changd | Not Changd |
| Sample Status |  |  |  | NORMAL | NORMAL | NORMAL |
| CONTAMINATION |  | method | limitbase | current | history 1 | history2 |
| Water |  | WC Method | >0.1 | NEG | NEG | NEG |
| WEAR METALS |  | method | limitbase | current | history1 | history2 |
| Iron p | ppm | ASTM D5185m | >160 | 13 | 12 | 10 |
| Chromium p | ppm | ASTM D5185m | >5 | 0 | $<1$ | $<1$ |
| Nickel p | ppm | ASTM D5185m | >5 | 0 | <1 | 0 |
| Titanium p | ppm | ASTM D5185m |  | 0 | <1 | 0 |
| Silver p | ppm | ASTM D5185m | >5 | 0 | <1 | 0 |
| Aluminum | ppm | ASTM D5185m | >50 | 1 | 1 | <1 |
| Lead p | ppm | ASTM D5185m | >50 | 0 | 2 | 0 |
| Copper | ppm | ASTM D5185m | >225 | 1 | 2 | <1 |
| Tin | ppm | ASTM D5185m | >10 | 0 | <1 | 0 |
| Vanadium | ppm | ASTM D5185m |  | 0 | <1 | 0 |
| Cadmium p | ppm | ASTM D5185m |  | 0 | <1 | 0 |


| ADDITIVES |  | method | limitbase | current | history1 | history2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Boron | ppm | ASTM D5185m |  | 66 | 70 | 76 |
| Barium | ppm | ASTM D5185m |  | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m |  | 0 | 1 | 0 |
| Manganese | ppm | ASTM D5185m |  | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m |  | 4 | 4 | 3 |
| Calcium | ppm | ASTM D5185m |  | 124 | 115 | 135 |
| Phosphorus | ppm | ASTM D5185m |  | 255 | 211 | 227 |
| Zinc | ppm | ASTM D5185m |  | 55 | 64 | 54 |
| Sulfur | ppm | ASTM D5185m |  | 1888 | 1804 | 1638 |
| CONTAMINANT |  | method | limitbase | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >20 | 3 | 4 | 4 |
| Sodium | ppm | ASTM D5185m |  | 2 | 0 | 1 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 1 | <1 |


| VISUAL |  |  | method | limit/base | 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 |

Submitted By: JOSHUA TINKER

## OIL ANALYSIS REPORT



| FLUID PROPERTIES | method | limitbase | current | history1 | history2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Visc @ 40 ${ }^{\circ} \mathrm{C}$ cSt | ASTM D445 | 34 | 34.1 | 34.5 | 34.2 |
| SAMPLE IMAGES | method | limitbase | current | history1 | history2 |
| Color |  |  | no image | no image | no image |
| Bottom |  |  | no image | no image | no image |
| GRAPHS |  |  |  |  |  |



Non-ferrous Metals


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


Certificate L2367

| Laboratory | : WearCheck USA - 501 Madison Ave., Cary, NC 27513 |  |  |
| :--- | :--- | :--- | :--- |
| Sample No. | : GFL0115739 | Received | $: 05$ Apr 2024 |
| Lab Number | $: 06140335$ | Tested | $: 08$ Apr 2024 |
| Unique Number | $: 10965143$ | Diagnosed | $: 08$ Apr 2024-Wes Davis | Unique Number : 10965143 Test Package : FLEET

GFL Environmental - 010-Stockbridge 1280 Rum Creek Parkway Stockbridge, GA US 30281 Contact: JOSHUA TINKER joshuatinker@gflenv.com

*     - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

