

## **OIL ANALYSIS REPORT**

### Sample Rating Trend

ug2022 Nov2022 Dec2022 Feb2023 Mar2023 Mar2023 Jun2023 4un2023





Component

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 oil.

## Fluid Condition

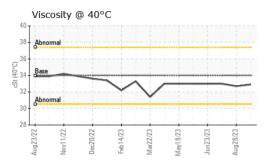
The condition of the oil is acceptable for the time in service.

|                  |        | lug2022 Nov | 2022 Dec2022 Feb2023 | Mar2023 May2023 Jun2023     | Aug2023     |             |  |
|------------------|--------|-------------|----------------------|-----------------------------|-------------|-------------|--|
| SAMPLE INFOR     | MATION | method      | limit/base           | current                     | history1    | history2    |  |
| Sample Number    |        | Client Info |                      | GFL0094290                  | GFL0091382  | GFL0088711  |  |
| Sample Date      |        | Client Info |                      | 21 Sep 2023                 | 28 Aug 2023 | 16 Aug 2023 |  |
| Machine Age      | hrs    | Client Info |                      | 16032                       | 15811       | 15628       |  |
| Oil Age          | hrs    | Client Info |                      | 153                         | 1078        | 895         |  |
| Oil Changed      |        | Client Info |                      | Not Changd                  | Not Changd  | Not Changd  |  |
| Sample Status    |        |             |                      | NORMAL                      | NORMAL      | NORMAL      |  |
| WEAR METAL       | S      | method      | limit/base           | current                     | history1    | history2    |  |
| Iron             | ppm    | ASTM D5185m | >160                 | 54                          | 57          | 57          |  |
| Chromium         | ppm    | ASTM D5185m | >5                   | <1                          | 0           | 0           |  |
| Nickel           | ppm    | ASTM D5185m | >5                   | 0                           | 0           | 0           |  |
| Titanium         | ppm    | ASTM D5185m |                      | 0                           | 0           | 0           |  |
| Silver           | ppm    | ASTM D5185m | >5                   | 0                           | 0           | <1          |  |
| Aluminum         | ppm    | ASTM D5185m | >50                  | 8                           | 9           | 8           |  |
| Lead             | ppm    | ASTM D5185m | >50                  | 1                           | <1          | 1           |  |
| Copper           | ppm    | ASTM D5185m | >225                 | 12                          | 7           | 8           |  |
| Tin              | ppm    | ASTM D5185m | >10                  | 1                           | <1          | <1          |  |
| Vanadium         | ppm    | ASTM D5185m |                      | 0                           | 0           | 0           |  |
| Cadmium          | ppm    | ASTM D5185m |                      | 0                           | 0           | 0           |  |
| ADDITIVES        |        | method      | limit/base           | current                     | history1    | history2    |  |
| Boron            | ppm    | ASTM D5185m |                      | 60                          | 57          | 57          |  |
| Barium           | ppm    | ASTM D5185m |                      | 0                           | 0           | 2           |  |
| Molybdenum       | ppm    | ASTM D5185m |                      | 1                           | 0           | <1          |  |
| Manganese        | ppm    | ASTM D5185m |                      | 2                           | <1          | <1          |  |
| Magnesium        | ppm    | ASTM D5185m |                      | 7                           | 3           | 4           |  |
| Calcium          | ppm    | ASTM D5185m |                      | 134                         | 123         | 126         |  |
| Phosphorus       | ppm    | ASTM D5185m |                      | 226                         | 216         | 202         |  |
| Zinc             | ppm    | ASTM D5185m |                      | 12                          | 1           | 11          |  |
| Sulfur           | ppm    | ASTM D5185m |                      | 1732                        | 2057        | 1824        |  |
| CONTAMINAN       | ITS    | method      | limit/base           | current                     | history1    | history2    |  |
| Silicon          | ppm    | ASTM D5185m | >20                  | 6                           | 6           | 6           |  |
| Sodium           | ppm    | ASTM D5185m |                      | 7                           | 2           | 0           |  |
| Potassium        | ppm    | ASTM D5185m | >20                  | 3                           | 1           | 2           |  |
| 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         |  |
| FLUID PROPE      | RTIES  | method      | limit/base           | current                     | history1    | history2    |  |
| Visc @ 40°C      | cSt    | ASTM D445   | 34                   | 32.9                        | 32.7        | 33.0        |  |
| 2:46:58) Rev: 1  |        |             |                      | Submitted By: JOSHUA TINKER |             |             |  |

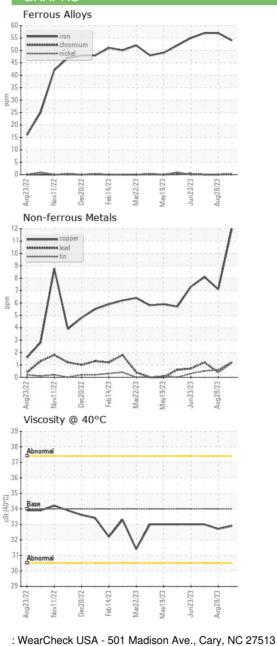
Report Id: GFL010 [WUSCAR] 05963870 (Generated: 10/01/2023 12:46:58) Rev: 1



# **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        |        |            |          |          |          |



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



Unique Number : 10670421 Diagnostician : Don Baldridge Test Package : FLEET Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. \* - 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)

Received

Diagnosed

: GFL0094290

: 05963870

: 28 Sep 2023

: 01 Oct 2023

Laboratory Sample No.

Lab Number

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