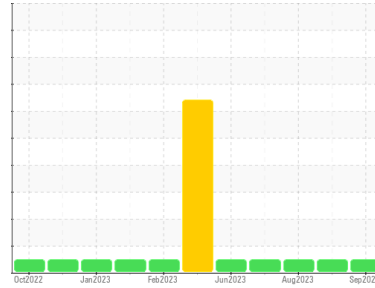




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**10482**

Component  
**Transmission (Auto)**

Fluid  
**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.

## SAMPLE INFORMATION

| method        | limit/base  | current            | history1    | history2    |       |
|---------------|-------------|--------------------|-------------|-------------|-------|
| Sample Number | Client Info | <b>GFL0091431</b>  | GFL0091397  | GFL0088794  |       |
| Sample Date   | Client Info | <b>12 Sep 2023</b> | 01 Sep 2023 | 04 Aug 2023 |       |
| Machine Age   | hrs         | Client Info        | <b>1382</b> | 1280        | 13787 |
| Oil Age       | hrs         | Client Info        | <b>427</b>  | 325         | 1297  |
| Oil Changed   | Client Info | <b>Not Chngd</b>   | Not Chngd   | Not Chngd   |       |
| Sample Status |             | <b>NORMAL</b>      | NORMAL      | NORMAL      |       |

## WEAR METALS

| method   | limit/base | current          | history1     | history2 |    |
|----------|------------|------------------|--------------|----------|----|
| Iron     | ppm        | ASTM D5185m >160 | <b>26</b>    | 27       | 41 |
| Chromium | ppm        | ASTM D5185m >5   | <b>0</b>     | 0        | <1 |
| Nickel   | ppm        | ASTM D5185m >5   | <b>&lt;1</b> | 0        | <1 |
| Titanium | ppm        | ASTM D5185m      | <b>0</b>     | 0        | 0  |
| Silver   | ppm        | ASTM D5185m >5   | <b>0</b>     | 0        | 0  |
| Aluminum | ppm        | ASTM D5185m >50  | <b>11</b>    | 10       | 15 |
| Lead     | ppm        | ASTM D5185m >50  | <b>0</b>     | 0        | 2  |
| Copper   | ppm        | ASTM D5185m >225 | <b>6</b>     | 8        | 11 |
| Tin      | ppm        | ASTM D5185m >10  | <b>1</b>     | 1        | 2  |
| Vanadium | ppm        | ASTM D5185m      | <b>0</b>     | 0        | 0  |
| Cadmium  | ppm        | ASTM D5185m      | <b>0</b>     | 0        | 0  |

## ADDITIVES

| method     | limit/base | current     | history1     | history2 |      |
|------------|------------|-------------|--------------|----------|------|
| Boron      | ppm        | ASTM D5185m | <b>61</b>    | 57       | 84   |
| Barium     | ppm        | ASTM D5185m | <b>0</b>     | 0        | 1    |
| Molybdenum | ppm        | ASTM D5185m | <b>0</b>     | <1       | <1   |
| Manganese  | ppm        | ASTM D5185m | <b>&lt;1</b> | <1       | <1   |
| Magnesium  | ppm        | ASTM D5185m | <b>3</b>     | 15       | 2    |
| Calcium    | ppm        | ASTM D5185m | <b>129</b>   | 138      | 164  |
| Phosphorus | ppm        | ASTM D5185m | <b>227</b>   | 230      | 287  |
| Zinc       | ppm        | ASTM D5185m | <b>4</b>     | 21       | 13   |
| Sulfur     | ppm        | ASTM D5185m | <b>2055</b>  | 1919     | 2469 |

## CONTAMINANTS

| method    | limit/base | current         | history1 | history2 |    |
|-----------|------------|-----------------|----------|----------|----|
| Silicon   | ppm        | ASTM D5185m >20 | <b>5</b> | 6        | 8  |
| Sodium    | ppm        | ASTM D5185m     | <b>4</b> | 5        | 6  |
| Potassium | ppm        | ASTM D5185m >20 | <b>0</b> | <1       | <1 |

## VISUAL

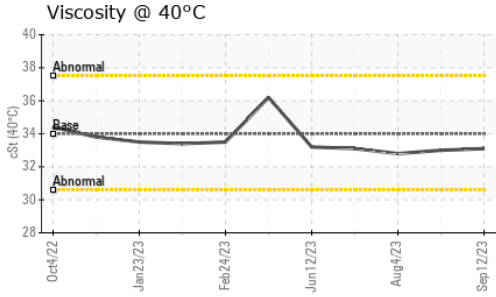
| method           | limit/base | current       | history1     | history2 |       |
|------------------|------------|---------------|--------------|----------|-------|
| White Metal      | scalar     | *Visual NONE  | <b>NONE</b>  | NONE     | NONE  |
| Yellow Metal     | scalar     | *Visual NONE  | <b>NONE</b>  | NONE     | NONE  |
| Precipitate      | scalar     | *Visual NONE  | <b>NONE</b>  | NONE     | NONE  |
| Silt             | scalar     | *Visual NONE  | <b>NONE</b>  | NONE     | NONE  |
| Debris           | scalar     | *Visual NONE  | <b>NONE</b>  | NONE     | NONE  |
| Sand/Dirt        | scalar     | *Visual NONE  | <b>NONE</b>  | NONE     | NONE  |
| Appearance       | scalar     | *Visual NORML | <b>NORML</b> | NORML    | NORML |
| Odor             | scalar     | *Visual NORML | <b>NORML</b> | NORML    | NORML |
| Emulsified Water | scalar     | *Visual >0.1  | <b>NEG</b>   | NEG      | NEG   |
| Free Water       | scalar     | *Visual       | <b>NEG</b>   | NEG      | NEG   |

## FLUID PROPERTIES

| method      | limit/base | current      | history1    | history2 |      |
|-------------|------------|--------------|-------------|----------|------|
| Visc @ 40°C | cSt        | ASTM D445 34 | <b>33.1</b> | 33.0     | 32.8 |

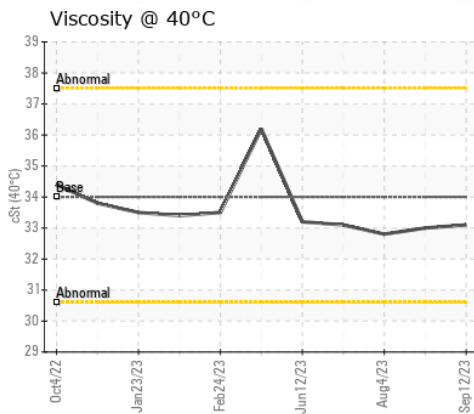
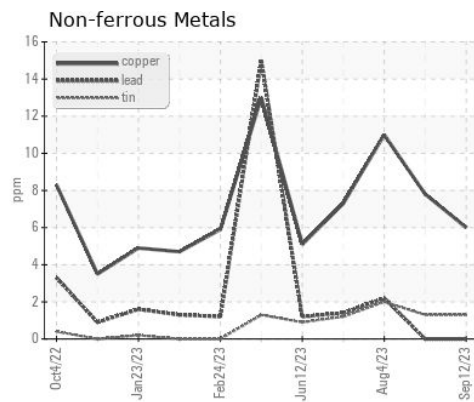
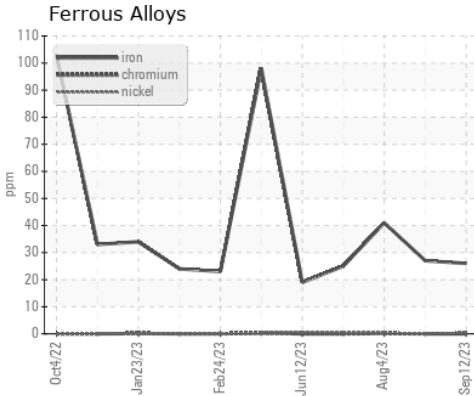


# OIL ANALYSIS REPORT



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

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0091431 **Received** : 14 Sep 2023  
**Lab Number** : 05951849 **Diagnosed** : 19 Sep 2023  
**Unique Number** : 10647808 **Diagnostician** : Don Baldrige  
**Test Package** : FLEET

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

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)