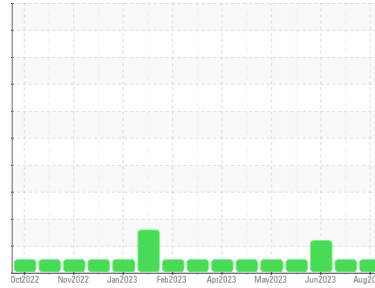




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**10949**

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>GFL0088701</b>  | GFL0086106  | GFL0083256  |
| Sample Date   | Client Info |             | <b>16 Aug 2023</b> | 26 Jul 2023 | 13 Jun 2023 |
| Machine Age   | hrs         | Client Info | <b>12830</b>       | 12664       | 12337       |
| Oil Age       | hrs         | Client Info | <b>166</b>         | 2301        | 1974        |
| Oil Changed   | Client Info |             | <b>Not Changed</b> | Changed     | Not Changed |
| Sample Status |             |             | <b>NORMAL</b>      | NORMAL      | ABNORMAL    |

## WEAR METALS

|          | method | limit/base       | current   | history1 | history2 |
|----------|--------|------------------|-----------|----------|----------|
| Iron     | ppm    | ASTM D5185m >160 | <b>45</b> | 46       | 35       |
| Chromium | ppm    | ASTM D5185m >5   | <b>0</b>  | 0        | 0        |
| Nickel   | ppm    | ASTM D5185m >5   | <b>0</b>  | 0        | 0        |
| Titanium | ppm    | ASTM D5185m      | <b>0</b>  | 0        | <1       |
| Silver   | ppm    | ASTM D5185m >5   | <b>0</b>  | 0        | 0        |
| Aluminum | ppm    | ASTM D5185m >50  | <b>19</b> | 19       | 13       |
| Lead     | ppm    | ASTM D5185m >50  | <b>1</b>  | <1       | 2        |
| Copper   | ppm    | ASTM D5185m >225 | <b>11</b> | 10       | 10       |
| Tin      | ppm    | ASTM D5185m >10  | <b>2</b>  | 1        | 1        |
| Vanadium | ppm    | ASTM D5185m      | <b>0</b>  | <1       | <1       |
| Cadmium  | ppm    | ASTM D5185m      | <b>0</b>  | 0        | 0        |

## ADDITIVES

|            | method | limit/base  | current      | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185m | <b>46</b>    | 57       | 56       |
| Barium     | ppm    | ASTM D5185m | <b>2</b>     | 0        | 0        |
| Molybdenum | ppm    | ASTM D5185m | <b>&lt;1</b> | <1       | <1       |
| Manganese  | ppm    | ASTM D5185m | <b>&lt;1</b> | <1       | <1       |
| Magnesium  | ppm    | ASTM D5185m | <b>4</b>     | 0        | 2        |
| Calcium    | ppm    | ASTM D5185m | <b>114</b>   | 111      | 117      |
| Phosphorus | ppm    | ASTM D5185m | <b>251</b>   | 252      | 321      |
| Zinc       | ppm    | ASTM D5185m | <b>142</b>   | 120      | 87       |
| Sulfur     | ppm    | ASTM D5185m | <b>1538</b>  | 1675     | 1657     |

## CONTAMINANTS

|           | method | limit/base      | current  | history1 | history2 |
|-----------|--------|-----------------|----------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >20 | <b>6</b> | 6        | 5        |
| Sodium    | ppm    | ASTM D5185m     | <b>0</b> | 4        | 3        |
| Potassium | ppm    | ASTM D5185m >20 | <b>2</b> | <1       | 0        |

## VISUAL

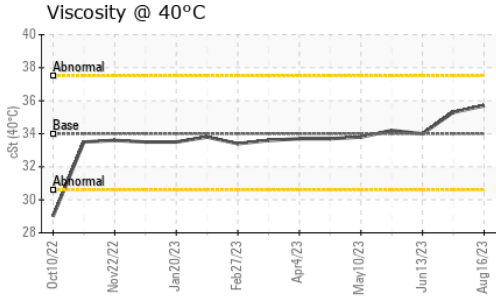
|                  | method | limit/base    | current      | history1 | history2 |
|------------------|--------|---------------|--------------|----------|----------|
| White Metal      | scalar | *Visual NONE  | <b>NONE</b>  | NONE     | ▲ MODER  |
| Yellow Metal     | scalar | *Visual NONE  | <b>NONE</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>LIGHT</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>35.7</b> | 35.3     | 34.0     |

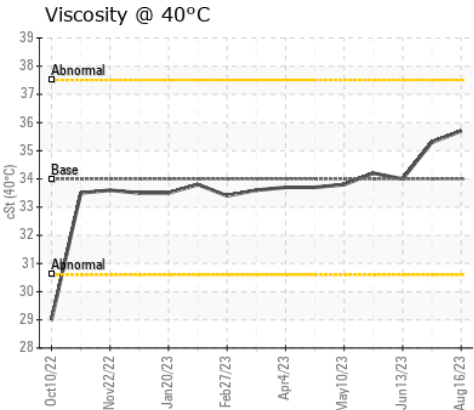
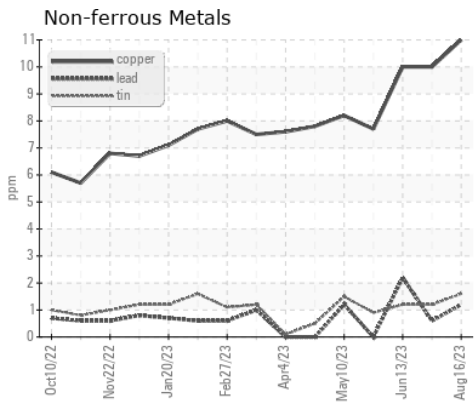
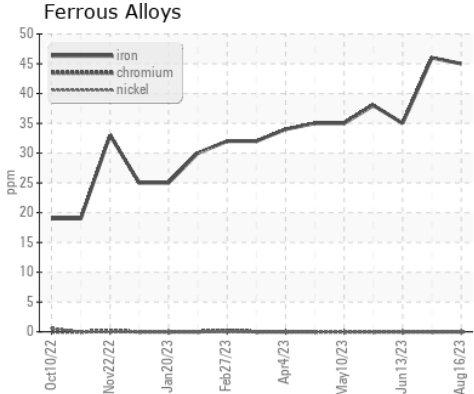


# OIL ANALYSIS REPORT



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

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0088701     **Received** : 17 Aug 2023  
**Lab Number** : 05927646     **Diagnosed** : 18 Aug 2023  
**Unique Number** : 10607593     **Diagnostician** : Sean Felton  
**Test Package** : FLEET

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

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)