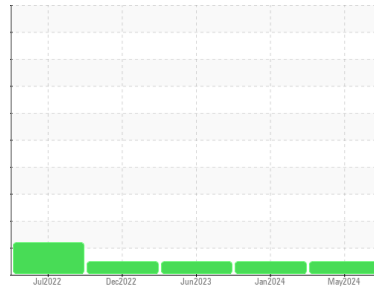




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**731116**

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 fluid.

### Fluid Condition

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

## SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1    | history2    |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info |             | <b>GFL0120165</b>  | GFL0103301  | GFL0083740  |
| Sample Date   | Client Info |             | <b>23 May 2024</b> | 16 Jan 2024 | 08 Jun 2023 |
| Machine Age   | hrs         | Client Info | <b>7051</b>        | 6307        | 5073        |
| Oil Age       | hrs         | Client Info | <b>0</b>           | 1200        | 5073        |
| Oil Changed   | Client Info |             | <b>Changed</b>     | Not Changd  | Not Changd  |
| Sample Status |             |             | <b>NORMAL</b>      | NORMAL      | NORMAL      |

## CONTAMINATION

|       | method    | limit/base | current    | history1 | history2 |
|-------|-----------|------------|------------|----------|----------|
| Water | WC Method | >0.1       | <b>NEG</b> | NEG      | NEG      |

## WEAR METALS

|          | method | limit/base       | current      | history1 | history2 |
|----------|--------|------------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >160 | <b>40</b>    | 42       | 119      |
| Chromium | ppm    | ASTM D5185m >5   | <b>&lt;1</b> | <1       | <1       |
| Nickel   | ppm    | ASTM D5185m >5   | <b>&lt;1</b> | 0        | 1        |
| Titanium | ppm    | ASTM D5185m      | <b>&lt;1</b> | 0        | 0        |
| Silver   | ppm    | ASTM D5185m >5   | <b>1</b>     | 0        | 0        |
| Aluminum | ppm    | ASTM D5185m >50  | <b>13</b>    | 9        | 41       |
| Lead     | ppm    | ASTM D5185m >50  | <b>2</b>     | 1        | 7        |
| Copper   | ppm    | ASTM D5185m >225 | <b>9</b>     | 6        | 14       |
| Tin      | ppm    | ASTM D5185m >10  | <b>2</b>     | <1       | 3        |
| Vanadium | ppm    | ASTM D5185m      | <b>&lt;1</b> | 0        | 0        |
| Cadmium  | ppm    | ASTM D5185m      | <b>&lt;1</b> | 0        | 0        |

## ADDITIVES

|            | method | limit/base  | current      | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185m | <b>73</b>    | 88       | 77       |
| Barium     | ppm    | ASTM D5185m | <b>&lt;1</b> | 3        | 0        |
| Molybdenum | ppm    | ASTM D5185m | <b>2</b>     | 0        | <1       |
| Manganese  | ppm    | ASTM D5185m | <b>1</b>     | 0        | 2        |
| Magnesium  | ppm    | ASTM D5185m | <b>27</b>    | <1       | 1        |
| Calcium    | ppm    | ASTM D5185m | <b>131</b>   | 114      | 62       |
| Phosphorus | ppm    | ASTM D5185m | <b>229</b>   | 254      | 239      |
| Zinc       | ppm    | ASTM D5185m | <b>32</b>    | 0        | 0        |
| Sulfur     | ppm    | ASTM D5185m | <b>1550</b>  | 1590     | 1201     |

## CONTAMINANTS

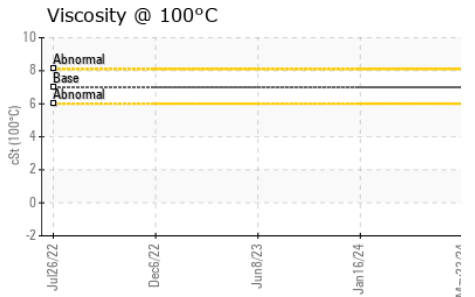
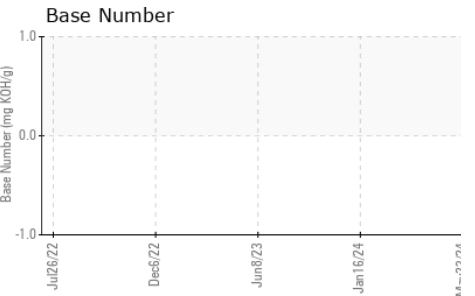
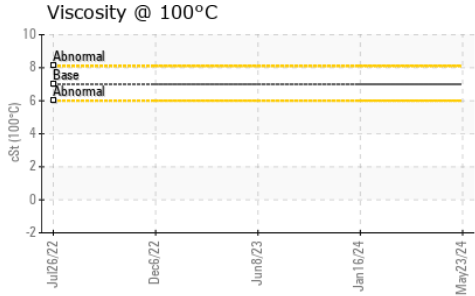
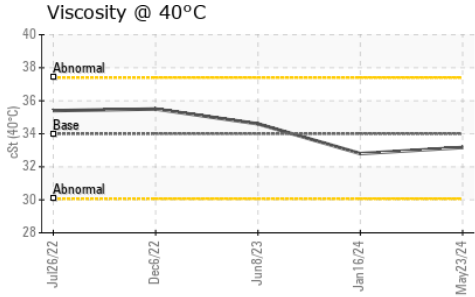
|           | method | limit/base      | current  | history1 | history2 |
|-----------|--------|-----------------|----------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >20 | <b>6</b> | 5        | 7        |
| Sodium    | ppm    | ASTM D5185m     | <b>4</b> | 0        | 9        |
| Potassium | ppm    | ASTM D5185m >20 | <b>3</b> | 2        | 4        |

## 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      |



# OIL ANALYSIS REPORT



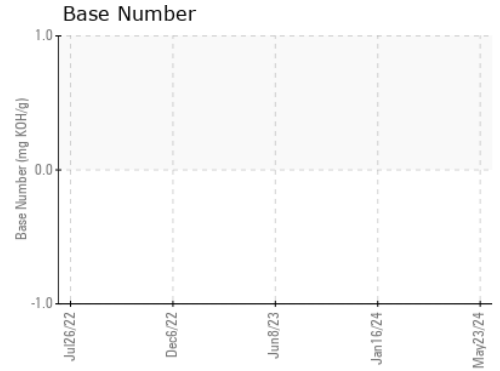
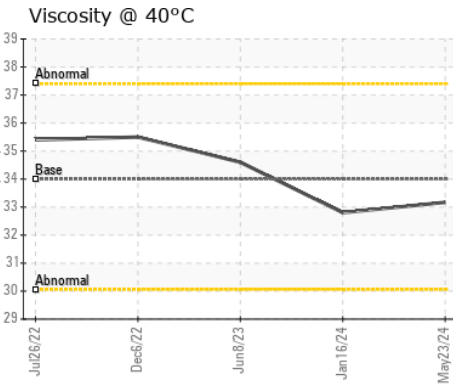
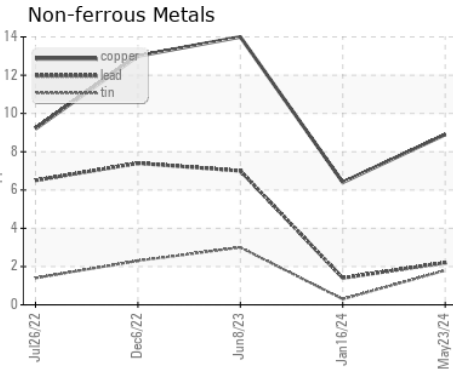
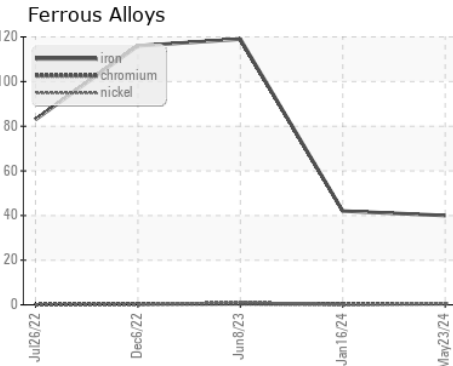
## FLUID PROPERTIES

| method      | limit/base       | current      | history1 | history2 |
|-------------|------------------|--------------|----------|----------|
| Visc @ 40°C | cSt ASTM D445 34 | <b>33.17</b> | 32.8     | 34.6     |

## 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.** : GFL0120165      **Received** : 28 May 2024  
**Lab Number** : 06191871      **Tested** : 05 Jun 2024  
**Unique Number** : 11048623      **Diagnosed** : 05 Jun 2024 - Jonathan Hester  
**Test Package** : FLEET ( Additional Tests: FT-IR, KV100, TBN, VI )

**GFL Environmental - 836 - Kansas City Hauling**  
 7801 East Truman Road  
 Kansas City, MO  
 US 64126  
 Contact: Loyce Stewart  
 loyce.stewart@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)