

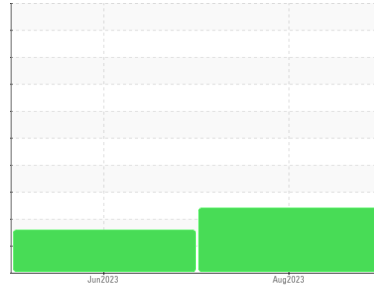


# PROBLEM SUMMARY



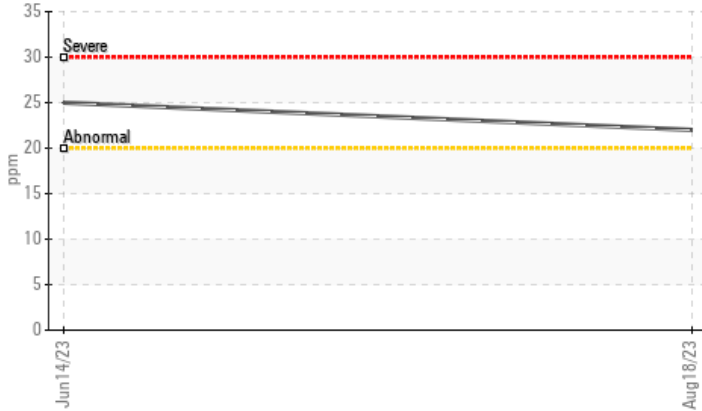
Area  
**{UNASSIGNED}**  
 Machine Id  
**834023**  
 Component  
**Transmission (Auto)**  
 Fluid  
**PETRO CANADA DuraDrive HD Synthetic 668 (8 GAL)**

Sample Rating Trend

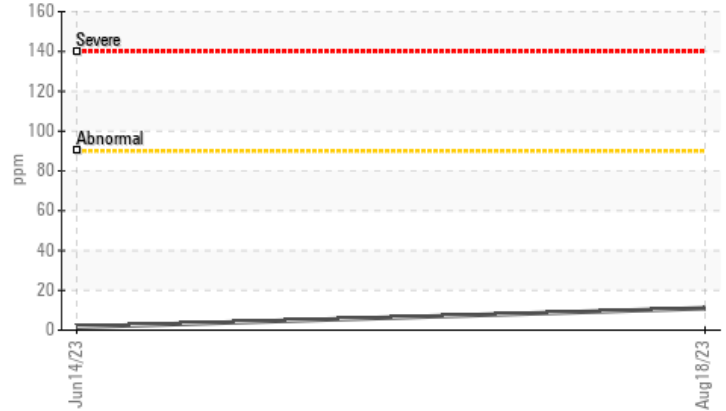


## COMPONENT CONDITION SUMMARY

▲ Silicon (ppm)



▲ Aluminum (ppm)



## RECOMMENDATION

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

| Sample Status |     |             |     | <b>ABNORMAL</b> | ABNORMAL | --- |
|---------------|-----|-------------|-----|-----------------|----------|-----|
| Aluminum      | ppm | ASTM D5185m | >90 | ▲ 11            | 2        | --- |
| Silicon       | ppm | ASTM D5185m | >20 | ▲ 22            | ▲ 25     | --- |

Customer Id: GFL010  
 Sample No.: GFL0088705  
 Lab Number: 05930092  
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Sean Felton +1 919-379-4092  
[sfelton@wearcheckusa.com](mailto:sfelton@wearcheckusa.com)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

| Action            | Status | Date | Done By | Description   |
|-------------------|--------|------|---------|---|
| Check Dirt Access | ---    | ---  | ?       | We advise that you check all areas where dirt can enter the system. |

## HISTORICAL DIAGNOSIS

14 Jun 2023 Diag: Sean Felton

DIRT



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Elemental level of silicon (Si) above normal indicating ingress of seal material. The condition of the fluid is acceptable for the time in service.

view report





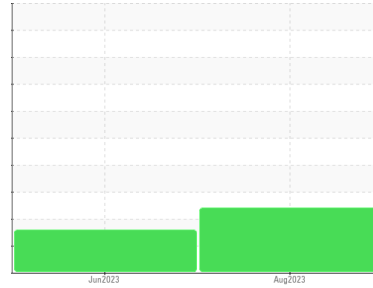
# OIL ANALYSIS REPORT

Sample Rating Trend

**DIRT**



Area  
**{UNASSIGNED}**  
 Machine Id  
**834023**  
 Component  
**Transmission (Auto)**  
 Fluid  
**PETRO CANADA DuraDrive HD Synthetic 668 (8 GAL)**



## DIAGNOSIS

### ▲ Recommendation

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.

### ▲ Wear

All component wear rates are normal.

### ▲ Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

### 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>GFL0088705</b>  | GFL0083226  | ---      |
| Sample Date   | Client Info |             | <b>18 Aug 2023</b> | 14 Jun 2023 | ---      |
| Machine Age   | hrs         | Client Info | <b>328</b>         | 10          | ---      |
| Oil Age       | hrs         | Client Info | <b>328</b>         | 10          | ---      |
| Oil Changed   | Client Info |             | <b>Not Chngd</b>   | Not Chngd   | ---      |
| Sample Status |             |             | <b>ABNORMAL</b>    | ABNORMAL    | ---      |

## WEAR METALS

|          | method | limit/base       | current      | history1 | history2 |
|----------|--------|------------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >235 | <b>36</b>    | 7        | ---      |
| Chromium | ppm    | ASTM D5185m >2   | <b>0</b>     | 0        | ---      |
| Nickel   | ppm    | ASTM D5185m >2   | <b>0</b>     | 0        | ---      |
| Titanium | ppm    | ASTM D5185m >4   | <b>&lt;1</b> | <1       | ---      |
| Silver   | ppm    | ASTM D5185m >5   | <b>0</b>     | 0        | ---      |
| Aluminum | ppm    | ASTM D5185m >90  | <b>▲ 11</b>  | 2        | ---      |
| Lead     | ppm    | ASTM D5185m >45  | <b>&lt;1</b> | 0        | ---      |
| Copper   | ppm    | ASTM D5185m >50  | <b>10</b>    | 1        | ---      |
| Tin      | ppm    | ASTM D5185m >10  | <b>&lt;1</b> | <1       | ---      |
| Vanadium | ppm    | ASTM D5185m      | <b>&lt;1</b> | <1       | ---      |
| Cadmium  | ppm    | ASTM D5185m      | <b>0</b>     | 0        | ---      |

## ADDITIVES

|            | method | limit/base  | current     | history1 | history2 |
|------------|--------|-------------|-------------|----------|----------|
| Boron      | ppm    | ASTM D5185m | <b>54</b>   | 77       | ---      |
| Barium     | ppm    | ASTM D5185m | <b>0</b>    | 0        | ---      |
| Molybdenum | ppm    | ASTM D5185m | <b>0</b>    | <1       | ---      |
| Manganese  | ppm    | ASTM D5185m | <b>1</b>    | 1        | ---      |
| Magnesium  | ppm    | ASTM D5185m | <b>1</b>    | 0        | ---      |
| Calcium    | ppm    | ASTM D5185m | <b>119</b>  | 130      | ---      |
| Phosphorus | ppm    | ASTM D5185m | <b>200</b>  | 223      | ---      |
| Zinc       | ppm    | ASTM D5185m | <b>15</b>   | 0        | ---      |
| Sulfur     | ppm    | ASTM D5185m | <b>1787</b> | 1958     | ---      |

## CONTAMINANTS

|           | method | limit/base      | current     | history1    | history2 |
|-----------|--------|-----------------|-------------|-------------|----------|
| Silicon   | ppm    | ASTM D5185m >20 | <b>▲ 22</b> | <b>▲ 25</b> | ---      |
| Sodium    | ppm    | ASTM D5185m     | <b>6</b>    | 4           | ---      |
| Potassium | ppm    | ASTM D5185m >20 | <b>3</b>    | 2           | ---      |

## VISUAL

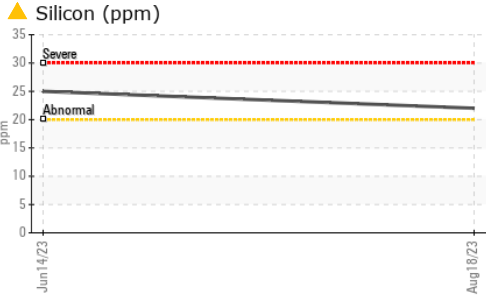
|                  | method | limit/base    | current      | history1 | history2 |
|------------------|--------|---------------|--------------|----------|----------|
| White Metal      | scalar | *Visual NONE  | <b>NONE</b>  | NONE     | ---      |
| Yellow Metal     | scalar | *Visual NONE  | <b>NONE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

## FLUID PROPERTIES

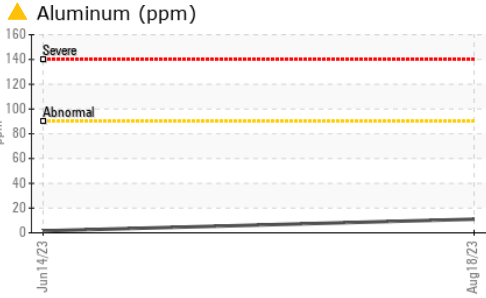
|             | method | limit/base   | current     | history1 | history2 |
|-------------|--------|--------------|-------------|----------|----------|
| Visc @ 40°C | cSt    | ASTM D445 34 | <b>32.7</b> | 33.2     | ---      |



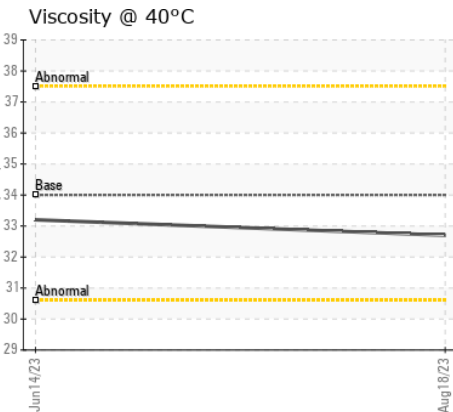
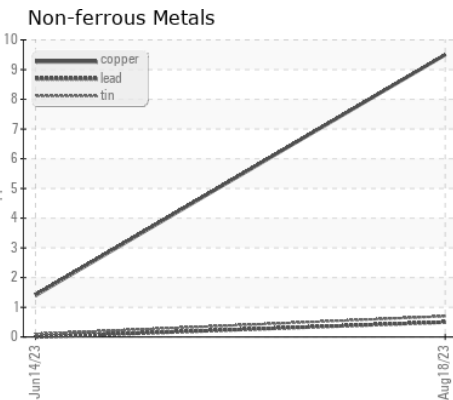
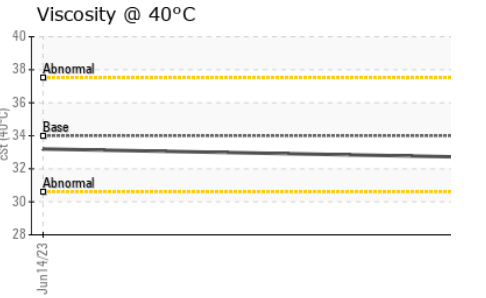
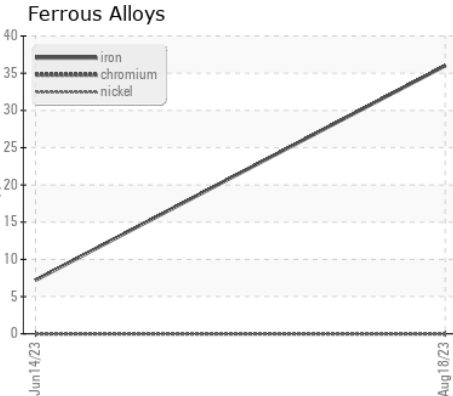
# OIL ANALYSIS REPORT



| 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.** : GFL0088705 **Received** : 21 Aug 2023  
**Lab Number** : 05930092 **Diagnosed** : 23 Aug 2023  
**Unique Number** : 10615363 **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)

T:  
F: