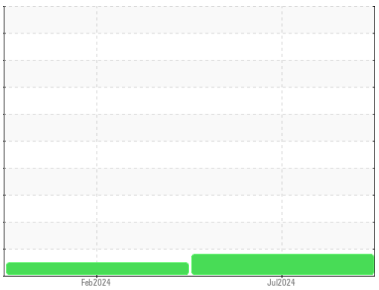
# OIL ANALYSIS REPORT

Sample Rating Trend




**SEDIMENT**

Machine Id
## 749012-310059
Component
**Transmission (Auto)**
Fluid
**PETRO CANADA DuraDrive HD Synthetic 668 (32 QTS)**

## DIAGNOSIS

**Recommendation**
Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

**Wear**
All component wear rates are normal.

**Contamination**
There is a moderate amount of visible silt present in the sample.

**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 | | **GFL0121886** | GFL0092064 | --- |
| Sample Date | | Client Info | | **03 Jul 2024** | 15 Feb 2024 | --- |
| Machine Age | hrs | Client Info | | **16254** | 15036 | --- |
| Oil Age | hrs | Client Info | | **605** | 0 | --- |
| Oil Changed | | Client Info | | **Changed** | Changed | --- |
| Sample Status | | | | **ABNORMAL** | NORMAL | --- |

| CONTAMINATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Water | | WC Method | >0.1 | **NEG** | NEG | --- |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >325 | **8** | 59 | --- |
| Chromium | ppm | ASTM D5185m | >2 | **0** | 0 | --- |
| Nickel | ppm | ASTM D5185m | >2 | **0** | 0 | --- |
| Titanium | ppm | ASTM D5185m | >3 | **0** | 0 | --- |
| Silver | ppm | ASTM D5185m | >5 | **0** | 0 | --- |
| Aluminum | ppm | ASTM D5185m | >75 | **6** | 37 | --- |
| Lead | ppm | ASTM D5185m | >40 | **0** | 1 | --- |
| Copper | ppm | ASTM D5185m | >50 | **2** | 15 | --- |
| Tin | ppm | ASTM D5185m | >10 | **0** | 2 | --- |
| Vanadium | ppm | ASTM D5185m | | **0** | 0 | --- |
| Cadmium | ppm | ASTM D5185m | | **<1** | 0 | --- |

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **48** | 61 | --- |
| Barium | ppm | ASTM D5185m | | **0** | <1 | --- |
| Molybdenum | ppm | ASTM D5185m | | **0** | <1 | --- |
| Manganese | ppm | ASTM D5185m | | **<1** | <1 | --- |
| Magnesium | ppm | ASTM D5185m | | **4** | 6 | --- |
| Calcium | ppm | ASTM D5185m | | **112** | 41 | --- |
| Phosphorus | ppm | ASTM D5185m | | **266** | 195 | --- |
| Zinc | ppm | ASTM D5185m | | **133** | 0 | --- |
| Sulfur | ppm | ASTM D5185m | | **1754** | 997 | --- |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >20 | **3** | 7 | --- |
| Sodium | ppm | ASTM D5185m | | **2** | 6 | --- |
| Potassium | ppm | ASTM D5185m | >20 | **1** | 3 | --- |

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

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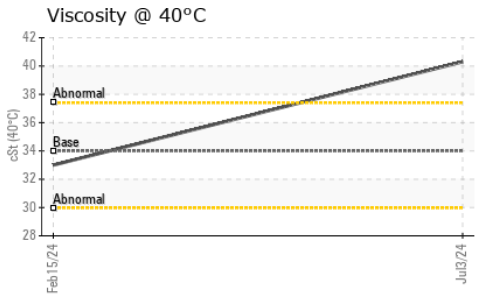
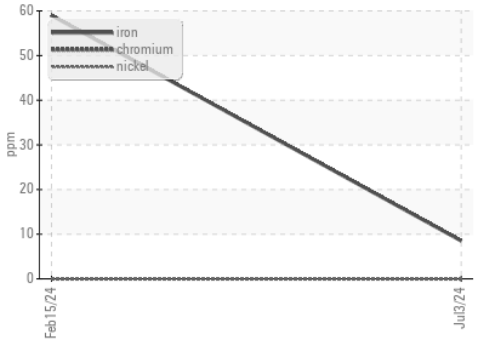



| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 34 | **40.3** | 33.0 | --- |

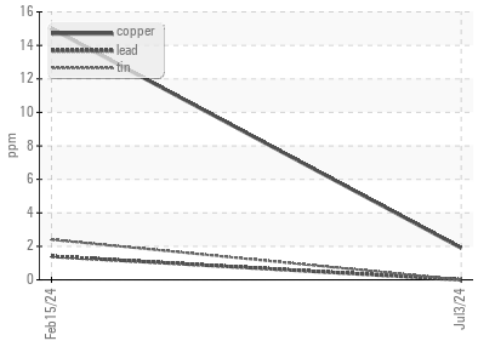
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | | *no image* | *no image* | *no image* |
| Bottom | | | *no image* | *no image* | *no image* |

## GRAPHS

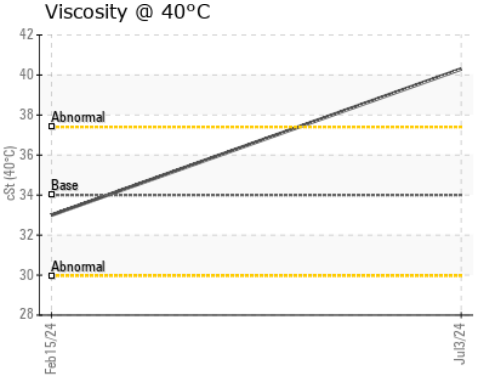
Ferrous Alloys




Non-ferrous Metals




Viscosity @ 40°C




ANAB ACCREDITED TESTING LABORATORY
Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : GFL0121886
**Lab Number** : 06229015
**Unique Number** : 11112508
**Test Package** : FLEET

**Received** : 05 Jul 2024
**Tested** : 08 Jul 2024
**Diagnosed** : 09 Jul 2024 - Sean Felton

*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)*

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Report Id: GFL856 [WUSCAR] 06229015 (Generated: 07/09/2024 10:59:04) Rev: 1

Submitted By: Apolinar Zacarias