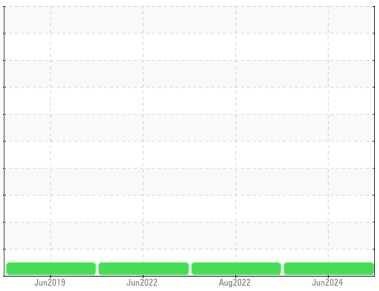
# OIL ANALYSIS REPORT

Sample Rating Trend




NORMAL

Machine Id
**4533**
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 AN level is acceptable for this fluid. The condition of the fluid is suitable for further service.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **GFL0117282** | GFL0057779 | GFL0052608 |
| Sample Date | | Client Info | | **04 Jun 2024** | 05 Aug 2022 | 14 Jun 2022 |
| Machine Age | kms | Client Info | | **243280** | 211233 | 206261 |
| Oil Age | kms | Client Info | | **0** | 4077 | 0 |
| Oil Changed | | Client Info | | **N/A** | Changed | N/A |
| Sample Status | | | | **NORMAL** | NORMAL | NORMAL |

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

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185(m) | >230 | **48** | 32 | 29 |
| Chromium | ppm | ASTM D5185(m) | >2 | **0** | 0 | 0 |
| Nickel | ppm | ASTM D5185(m) | >5 | **0** | 0 | <1 |
| Titanium | ppm | ASTM D5185(m) | >2 | **0** | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | >5 | **0** | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >65 | **12** | 8 | 7 |
| Lead | ppm | ASTM D5185(m) | >55 | **2** | 3 | 3 |
| Copper | ppm | ASTM D5185(m) | >85 | **9** | 8 | 7 |
| Tin | ppm | ASTM D5185(m) | >5 | **0** | 0 | 0 |
| Antimony | ppm | ASTM D5185(m) | | **0** | <1 | 0 |
| Vanadium | ppm | ASTM D5185(m) | | **0** | 0 | 0 |
| Beryllium | ppm | ASTM D5185(m) | | **0** | 0 | 0 |
| Cadmium | ppm | ASTM D5185(m) | | **0** | 0 | 0 |

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185(m) | 78 | **99** | 121 | 123 |
| Barium | ppm | ASTM D5185(m) | | **<1** | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 0 | **0** | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | | **1** | <1 | <1 |
| Magnesium | ppm | ASTM D5185(m) | 0 | **1** | <1 | <1 |
| Calcium | ppm | ASTM D5185(m) | 113 | **64** | 43 | 38 |
| Phosphorus | ppm | ASTM D5185(m) | 222 | **246** | 272 | 273 |
| Zinc | ppm | ASTM D5185(m) | | **10** | 10 | 7 |
| Sulfur | ppm | ASTM D5185(m) | 1326 | **619** | 367 | 347 |
| Lithium | ppm | ASTM D5185(m) | | **<1** | <1 | <1 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185(m) | >20 | **6** | 4 | 4 |
| Sodium | ppm | ASTM D5185(m) | | **3** | 3 | 2 |
| Potassium | ppm | ASTM D5185(m) | >20 | **<1** | 1 | <1 |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D974* | 1.4 | **1.16** | 1.20 | 1.19 |

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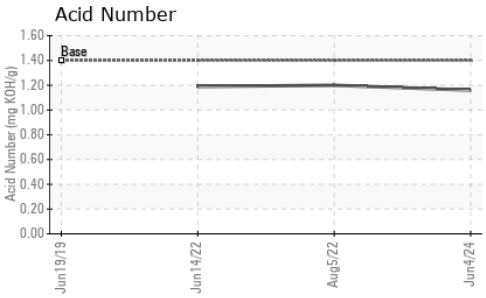
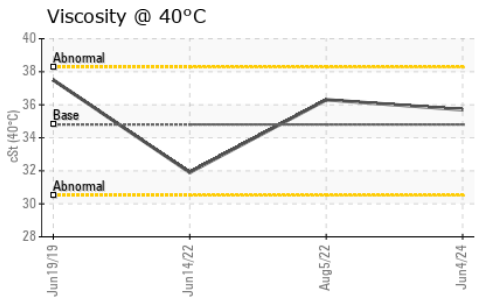
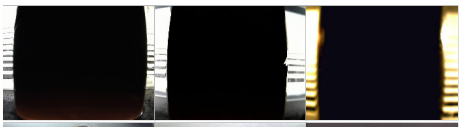


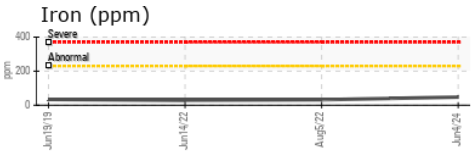



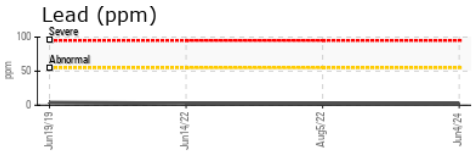

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | Visual* | NONE | **VLITE** | NONE | NONE |
| Yellow Metal | scalar | Visual* | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | Visual* | NONE | **NONE** | NONE | NONE |
|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

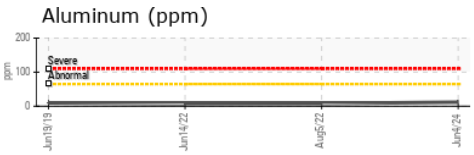
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D7279(m) | 34.8 | **35.7** | 36.3 | 31.9 |

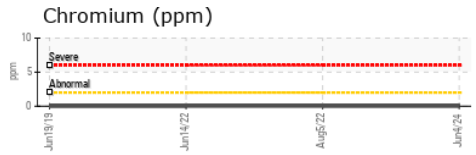
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  | | |
| Bottom | | |  | | |

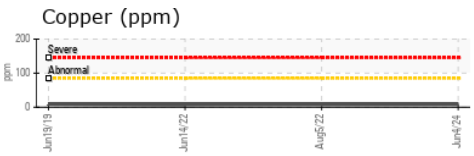
## GRAPHS

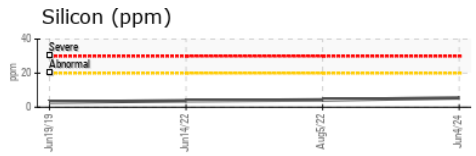


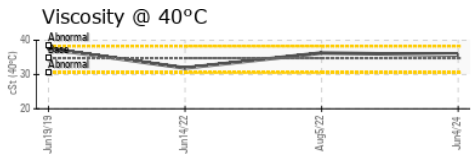



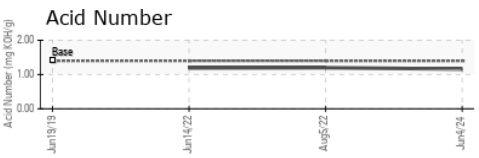




ISO 17025:2017 Accredited Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
**Sample No.** : GFL0117282
**Lab Number** : 02641190
**Unique Number** : 5798729
**Test Package** : MOB 2 ( Additional Tests: TAN Man )

**Received** : 11 Jun 2024
**Tested** : 11 Jun 2024
**Diagnosed** : 11 Jun 2024 - Wes Davis

*To discuss this sample report, contact Customer Service at 1-800-268-2131.*
*Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.*
*Validity of results and interpretation are based on the sample and information as supplied.*

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