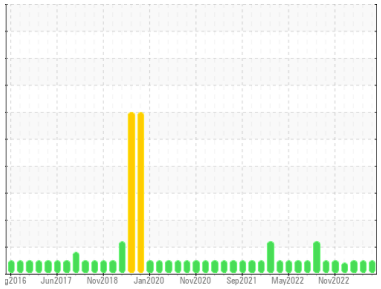
# OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
## 3571C AUTOCAR ACX
Component
**Natural Gas Engine**
Fluid
**PETRO CANADA DURON GEO LD 15W40 (48 QTS)**

## 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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **GFL0103172** | GFL0094675 | GFL0094706 |
| Sample Date | | Client Info | | **27 Mar 2024** | 27 Oct 2023 | 19 Oct 2023 |
| Machine Age | hrs | Client Info | | **7674** | 6468 | 6406 |
| Oil Age | hrs | Client Info | | **0** | 0 | 0 |
| Oil Changed | | Client Info | | **Not Changd** | Changed | Changed |
| 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 D5185m | >50 | **18** | 16 | 18 |
| Chromium | ppm | ASTM D5185m | >4 | **<1** | <1 | 1 |
| Nickel | ppm | ASTM D5185m | >2 | **1** | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | **0** | <1 | <1 |
| Silver | ppm | ASTM D5185m | >3 | **0** | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >9 | **5** | 7 | 7 |
| Lead | ppm | ASTM D5185m | >30 | **<1** | <1 | 0 |
| Copper | ppm | ASTM D5185m | >35 | **0** | 1 | 1 |
| Tin | ppm | ASTM D5185m | >4 | **<1** | 0 | <1 |
| Vanadium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | **0** | 0 | <1 |

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | 50 | **9** | 3 | 6 |
| Barium | ppm | ASTM D5185m | 5 | **0** | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 50 | **48** | 51 | 51 |
| Manganese | ppm | ASTM D5185m | 0 | **<1** | <1 | 1 |
| Magnesium | ppm | ASTM D5185m | 560 | **555** | 492 | 533 |
| Calcium | ppm | ASTM D5185m | 1510 | **1574** | 1465 | 1532 |
| Phosphorus | ppm | ASTM D5185m | 780 | **721** | 630 | 711 |
| Zinc | ppm | ASTM D5185m | 870 | **966** | 926 | 942 |
| Sulfur | ppm | ASTM D5185m | 2040 | **2822** | 2195 | 2501 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >+100 | **10** | 5 | 6 |
| Sodium | ppm | ASTM D5185m | | **8** | 9 | 10 |
| Potassium | ppm | ASTM D5185m | >20 | **23** | 4 | 5 |

| INFRA-RED | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Soot % | % | *ASTM D7844 | | **0** | 0 | 0 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | **11.2** | 10.8 | 10.4 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | **22.8** | 21.4 | 20.9 |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | **18.6** | 17.8 | 17.3 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 10.2 | **4.4** | 4.0 | 4.4 |

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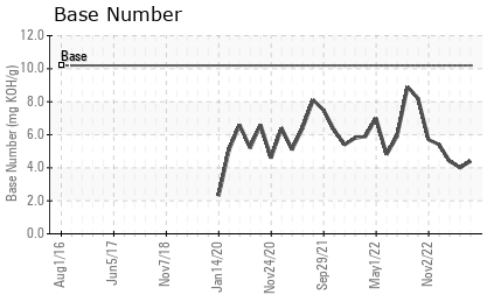
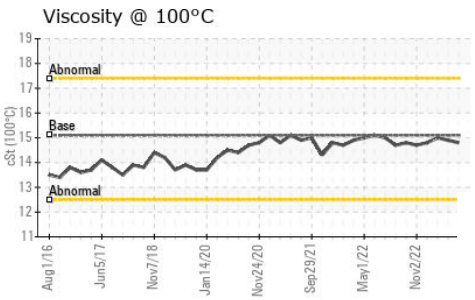
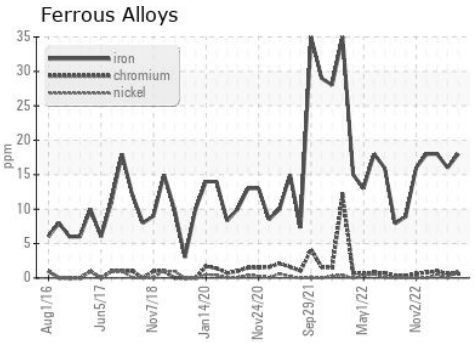


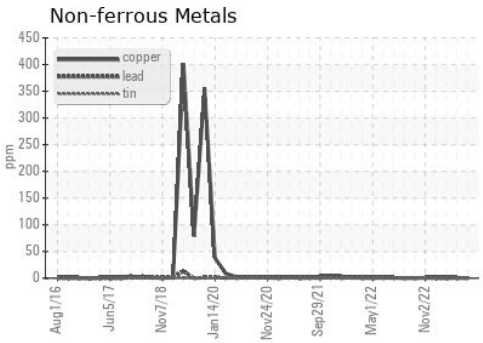



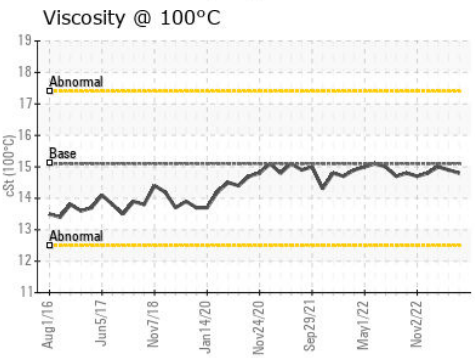

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | LIGHT |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Silt | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Debris | scalar | *Visual | NONE | **NONE** | NONE | LIGHT |
| Sand/Dirt | scalar | *Visual | NONE | **NONE** | NONE | 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 |

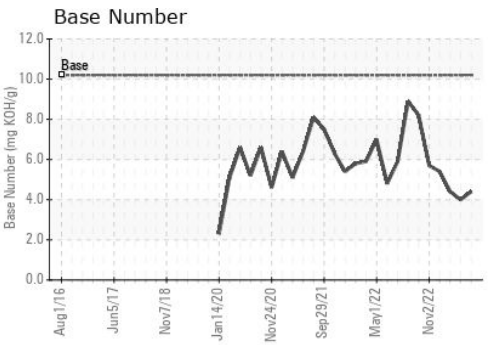
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 100°C | cSt | ASTM D445 | 15.1 | **14.8** | 14.9 | 15.0 |

## GRAPHS




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : GFL0103172
**Lab Number** : 06133026
**Unique Number** : 10952491
**Test Package** : FLEET

**Received** : 29 Mar 2024
**Tested** : 31 Mar 2024
**Diagnosed** : 31 Mar 2024 - Wes Davis

*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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