



| | |
|-----------------|---------------|
| WEAR | NORMAL |
| CONTAMINATION | NORMAL |
| FLUID CONDITION | NORMAL |

Machine Id
745000-361561
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (--- LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | GFL0115511 | GFL0106980 | GFL0094262 |
| Sample Date | | Client Info | | 10 Apr 2024 | 06 Jan 2024 | 03 Oct 2023 |
| Machine Age | mls | Client Info | | 352334 | 21828 | 34657 |
| Oil Age | mls | Client Info | | 352334 | 0 | 0 |
| Filter Age | mls | Client Info | | 352334 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | N/A | Changed |
| Filter Changed | | Client Info | | Changed | N/A | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >50 | 32 | 19 | 13 |
| Chromium | ppm | ASTM D5185m | >4 | <1 | <1 | 1 |
| Nickel | ppm | ASTM D5185m | >2 | <1 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >9 | 3 | 1 | 2 |
| Lead | ppm | ASTM D5185m | >30 | 2 | <1 | 0 |
| Copper | ppm | ASTM D5185m | >35 | <1 | <1 | 1 |
| Tin | ppm | ASTM D5185m | >4 | <1 | <1 | 0 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

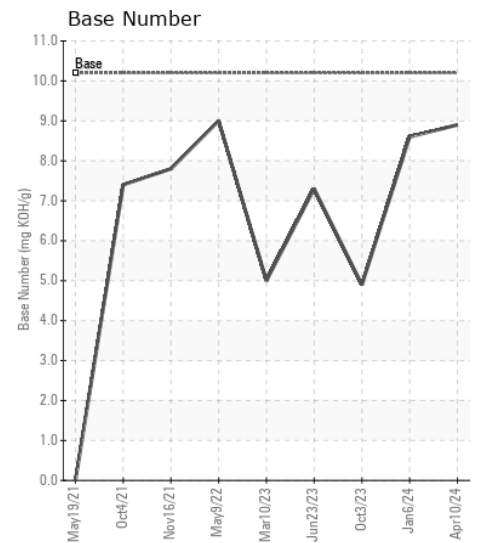
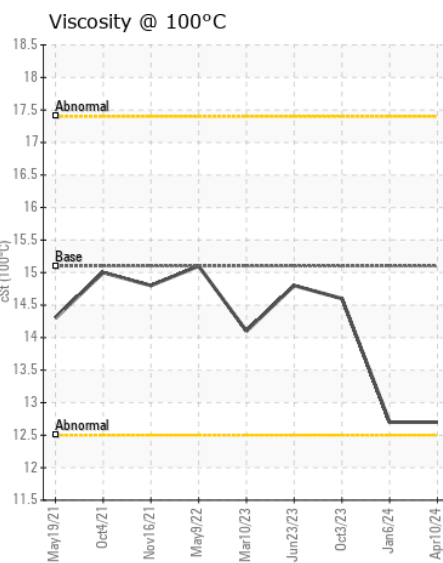
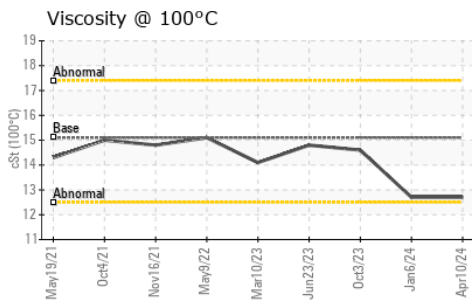
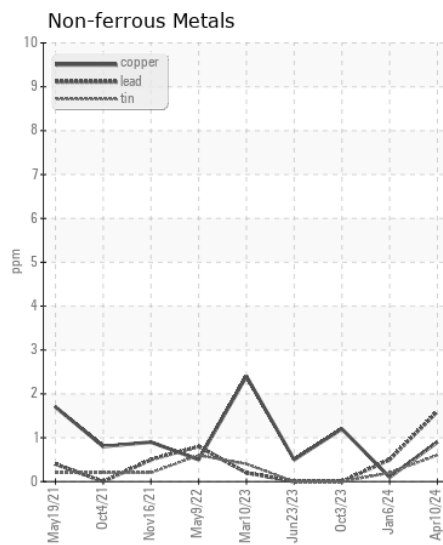
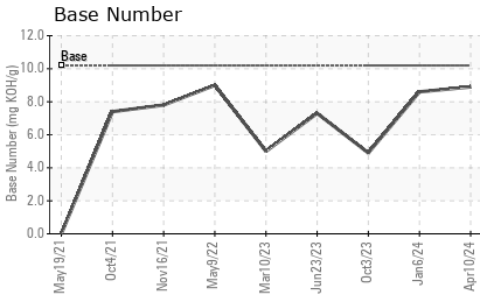
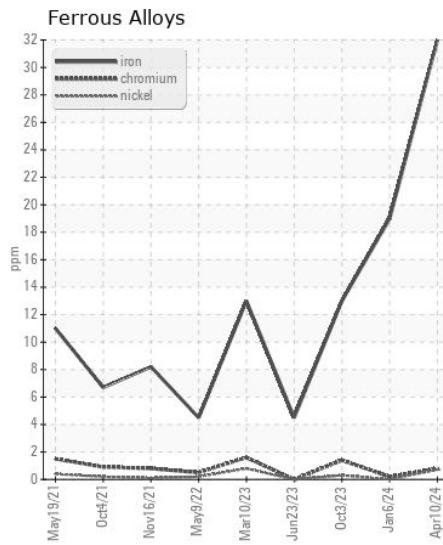
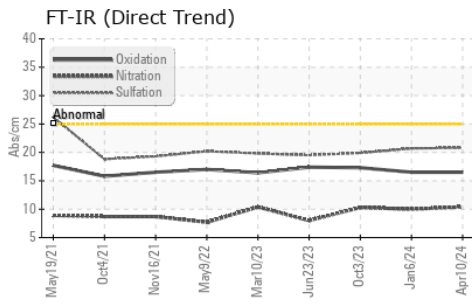
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >+100 | 6 | 3 | 4 |
| Potassium | ppm | ASTM D5185m | >20 | 14 | 8 | 1 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | | 1.5 | 1.5 | 0 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 10.4 | 10.0 | 10.3 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 20.8 | 20.7 | 19.9 |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE | NONE |
| 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 |

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.

| | | | | | | |
|------------------|----------|-------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185m | | 28 | 15 | 8 |
| Boron | ppm | ASTM D5185m | 50 | 5 | 3 | 6 |
| Barium | ppm | ASTM D5185m | 5 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 50 | 94 | 57 | 54 |
| Manganese | ppm | ASTM D5185m | 0 | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 560 | 1379 | 876 | 554 |
| Calcium | ppm | ASTM D5185m | 1510 | 1633 | 1052 | 1516 |
| Phosphorus | ppm | ASTM D5185m | 780 | 1565 | 1071 | 709 |
| Zinc | ppm | ASTM D5185m | 870 | 1833 | 1259 | 979 |
| Sulfur | ppm | ASTM D5185m | 2040 | 4712 | 3036 | 2649 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 16.5 | 16.5 | 17.3 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 10.2 | 8.9 | 8.6 | 4.9 |
| Visc @ 100°C | cSt | ASTM D445 | 15.1 | 12.7 | 12.7 | 14.6 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0115511
Lab Number : 06148292
Unique Number : 10978370
Test Package : FLEET

Received : 15 Apr 2024
Tested : 16 Apr 2024
Diagnosed : 17 Apr 2024 - Sean Felton

GFL Environmental - 882 - Gainesville
 5002 SW 41st Blvd
 Gainesville, FL
 US 32608

Contact: ROBERT CLARK
 robert.clark@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: