



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

Area

(TJX4156)

Machine Id

934056

Component

1 Natural Gas Engine

Fluid

PETRO CANADA DURON GEO LD 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | GFL0125215 | GFL0114408 | GFL0103944 |
| Sample Date | | Client Info | | 05 Jun 2024 | 27 Mar 2024 | 14 Feb 2024 |
| Machine Age | hrs | Client Info | | 2420 | 25769 | 1407 |
| Oil Age | hrs | Client Info | | 0 | 0 | 1407 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Changed | N/A |
| Filter Changed | | Client Info | | None | Changed | N/A |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >50 | 3 | 16 | 11 |
| Chromium | ppm | ASTM D5185m | >4 | 0 | <1 | 1 |
| Nickel | ppm | ASTM D5185m | >2 | <1 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >3 | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >9 | 2 | 9 | 8 |
| Lead | ppm | ASTM D5185m | >30 | 0 | 0 | <1 |
| Copper | ppm | ASTM D5185m | >35 | 2 | 2 | 2 |
| Tin | ppm | ASTM D5185m | >4 | <1 | <1 | 1 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

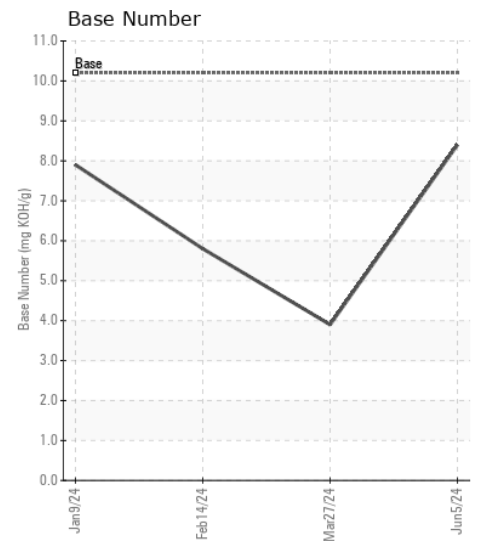
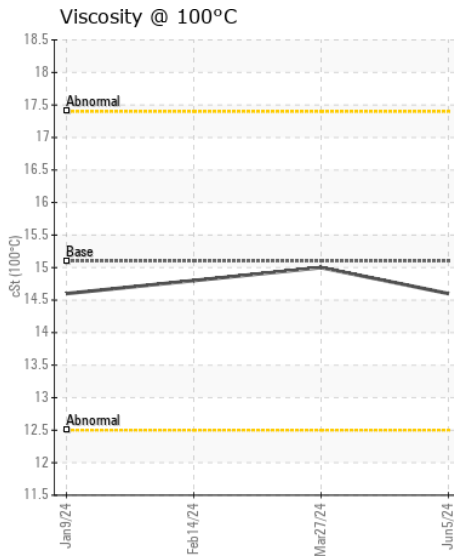
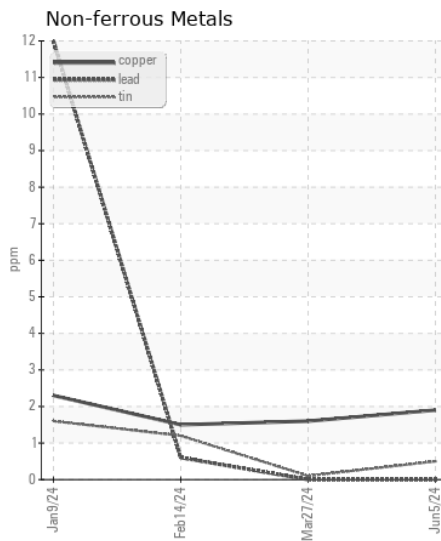
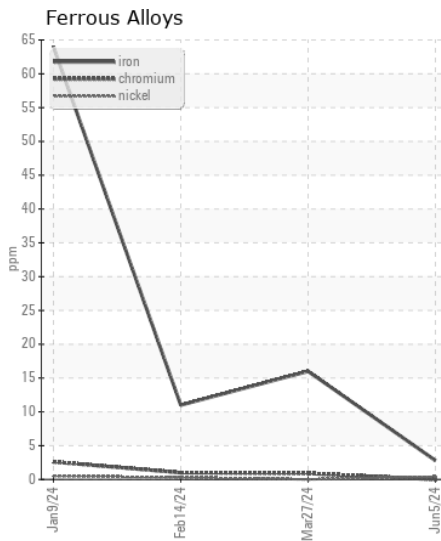
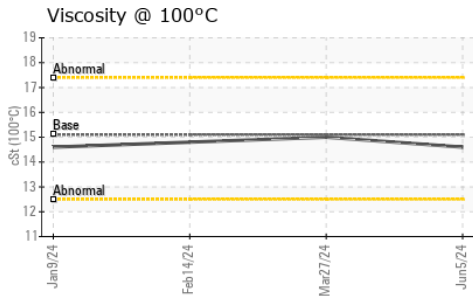
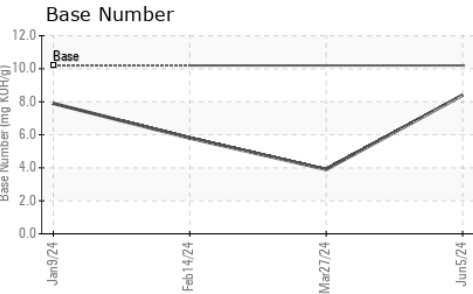
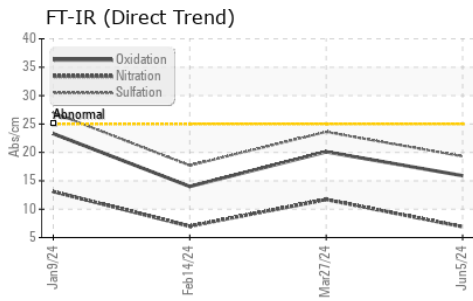
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >+100 | 4 | 5 | 7 |
| Potassium | ppm | ASTM D5185m | >20 | 6 | 39 | 27 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | | 0 | 0 | 0.3 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 6.9 | 11.7 | 7.0 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 19.3 | 23.6 | 17.7 |
| 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 | | 5 | 7 | 5 |
| Boron | ppm | ASTM D5185m | 50 | 36 | 5 | 15 |
| Barium | ppm | ASTM D5185m | 5 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 50 | 49 | 55 | 49 |
| Manganese | ppm | ASTM D5185m | 0 | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 560 | 588 | 593 | 552 |
| Calcium | ppm | ASTM D5185m | 1510 | 1577 | 1885 | 1536 |
| Phosphorus | ppm | ASTM D5185m | 780 | 803 | 763 | 730 |
| Zinc | ppm | ASTM D5185m | 870 | 959 | 1006 | 918 |
| Sulfur | ppm | ASTM D5185m | 2040 | 2967 | 2971 | 2306 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 15.9 | 20.1 | 14.0 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 10.2 | 8.4 | 3.9 | 5.8 |
| Visc @ 100°C | cSt | ASTM D445 | 15.1 | 14.6 | 15.0 | 14.8 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0125215
Lab Number : 06217480
Unique Number : 11090344
Test Package : FLEET

Received : 21 Jun 2024
Tested : 24 Jun 2024
Diagnosed : 24 Jun 2024 - Wes Davis

GFL Environmental - 865 - East Mount Hauling
 7213 East Mount Houston Road
 Houston, TX
 US 77050
 Contact: TECHNICIAN ACCOUNT
 wcgfldemo@gmail.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: