



Machine Id
731045
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (--- LTR)

RECOMMENDATION

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | GFL0117150 | GFL0085898 | GFL0064328 |
| Sample Date | | Client Info | | 12 Apr 2024 | 25 Sep 2023 | 31 Mar 2023 |
| Machine Age | hrs | Client Info | | 6491 | 5361 | 4294 |
| Oil Age | hrs | Client Info | | 1200 | 1200 | 1200 |
| Filter Age | hrs | Client Info | | 1200 | 1200 | 1200 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | ABNORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|---------------|------|--------------|-----|-----|
| Iron | ppm | ASTM D5185(m) | >50 | 18 | 11 | 12 |
| Chromium | ppm | ASTM D5185(m) | >4 | 2 | 1 | 1 |
| Nickel | ppm | ASTM D5185(m) | >2 | <1 | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | | <1 | 0 | <1 |
| Silver | ppm | ASTM D5185(m) | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >9 | 2 | 2 | 2 |
| Lead | ppm | ASTM D5185(m) | >30 | 10 | 2 | 1 |
| Copper | ppm | ASTM D5185(m) | >35 | 2 | 2 | 3 |
| Tin | ppm | ASTM D5185(m) | >4 | <1 | <1 | <1 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| White Metal | scalar | Visual* | NONE | NONE | --- | --- |
| Yellow Metal | scalar | Visual* | NONE | NONE | --- | --- |

CONTAMINATION

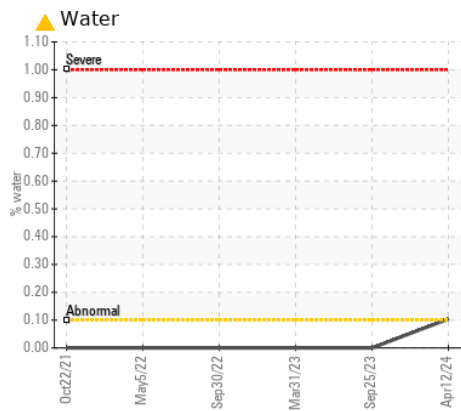
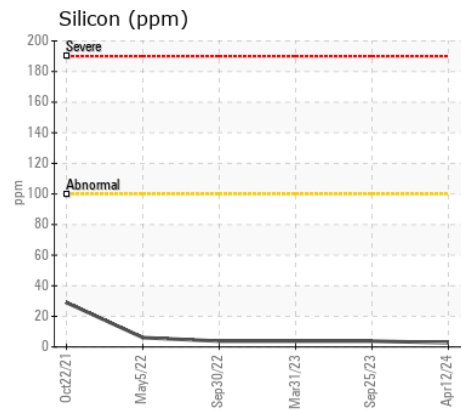
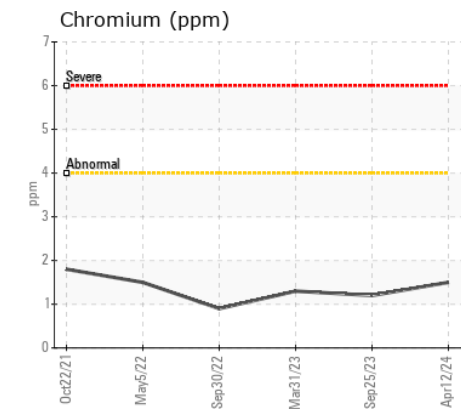
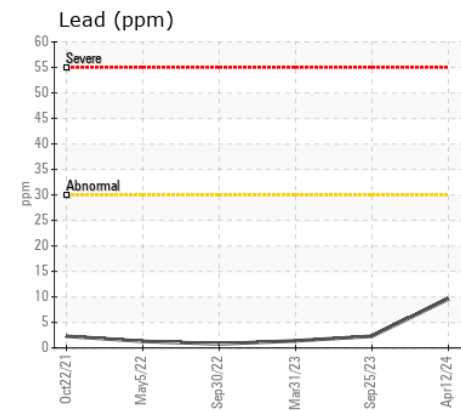
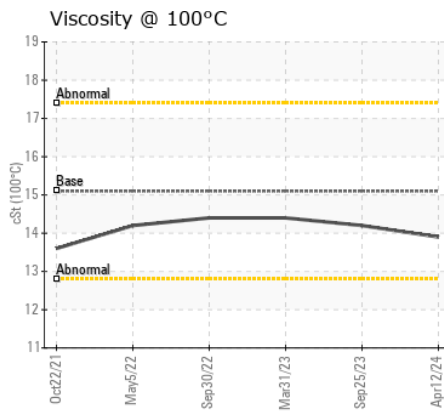
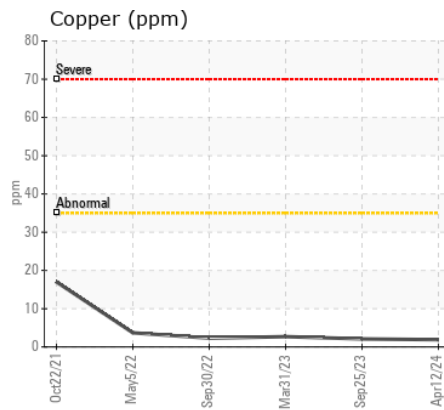
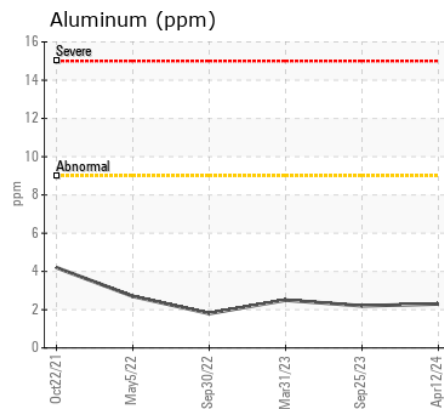
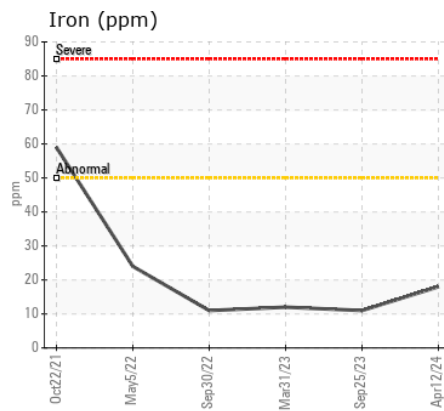
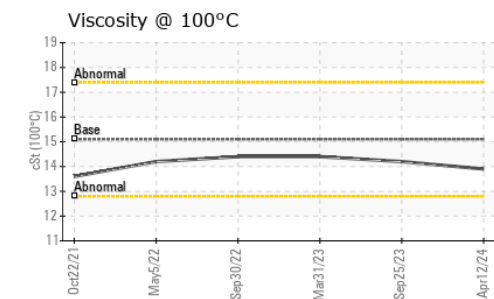
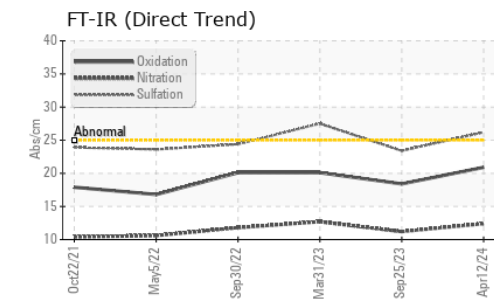
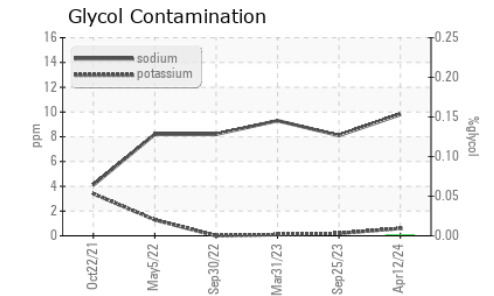
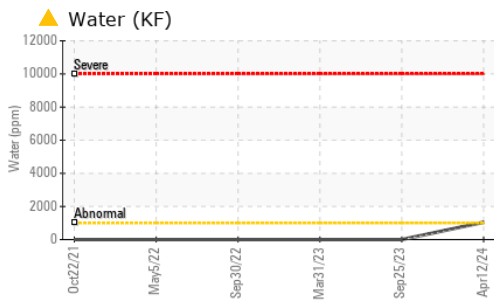
There is a moderate concentration of water present in the oil. Test for glycol is negative.

| | | | | | | |
|------------------|----------|---------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185(m) | >+100 | 3 | 4 | 4 |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | <1 | <1 |
| Water | % | ASTM D6304* | >0.1 | ▲ 0.104 | --- | --- |
| ppm Water | ppm | ASTM D6304* | >1000 | ▲ 1045 | --- | --- |
| Glycol | % | ASTM D7922* | | 0.0 | --- | --- |
| Soot % | % | ASTM D7844* | | 0 | 0 | 0 |
| Nitration | Abs/cm | ASTM D7624* | >20 | 12.4 | 11.2 | 12.7 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 26.2 | 23.4 | 27.5 |
| Silt | scalar | Visual* | NONE | NONE | --- | --- |
| Debris | scalar | Visual* | NONE | NONE | --- | --- |
| Sand/Dirt | scalar | Visual* | NONE | NONE | --- | --- |
| Appearance | scalar | Visual* | NORML | NORML | --- | --- |
| Odor | scalar | Visual* | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | Visual* | >0.1 | ▲ .2% | NEG | NEG |

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

| | | | | | | |
|--------------|----------|---------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185(m) | | 10 | 8 | 9 |
| Boron | ppm | ASTM D5185(m) | 50 | 6 | 8 | 8 |
| Barium | ppm | ASTM D5185(m) | 5 | <1 | <1 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 50 | 58 | 62 | 62 |
| Manganese | ppm | ASTM D5185(m) | 0 | <1 | 0 | <1 |
| Magnesium | ppm | ASTM D5185(m) | 560 | 622 | 606 | 617 |
| Calcium | ppm | ASTM D5185(m) | 1510 | 1695 | 1601 | 1773 |
| Phosphorus | ppm | ASTM D5185(m) | 780 | 742 | 710 | 797 |
| Zinc | ppm | ASTM D5185(m) | 870 | 951 | 920 | 960 |
| Sulfur | ppm | ASTM D5185(m) | 2040 | 2031 | 2004 | 2151 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 20.9 | 18.4 | 20.1 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 15.1 | 13.9 | 14.2 | 14.4 |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0117150
Lab Number : 02631087
Unique Number : 5772240
Test Package : MOB 1 (Additional Tests: Glycol, KF, Visual)

GFL Environmental - 209 - Hamilton
 560 Seaman Street
 Stoney Creek, ON
 CA L8E 3X7
 Contact: Fred Carleton
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 T: (289)925-6693
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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.