



Machine Id
731092
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 | | GFL0117108 | GFL0097777 | GFL0054902 |
| Sample Date | | Client Info | | 18 Jun 2024 | 08 Jan 2024 | 31 Jul 2023 |
| Machine Age | hrs | Client Info | | 7702 | 6560 | 5405 |
| 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 | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|---------------|------|--------------|-----|-----|
| Iron | ppm | ASTM D5185(m) | >50 | 14 | 12 | 11 |
| 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 | 7 | 11 | 10 |
| Copper | ppm | ASTM D5185(m) | >35 | 2 | 2 | 2 |
| 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

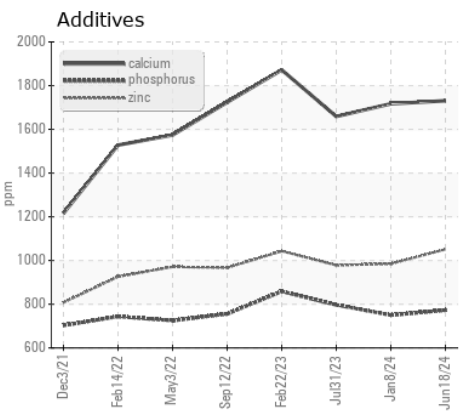
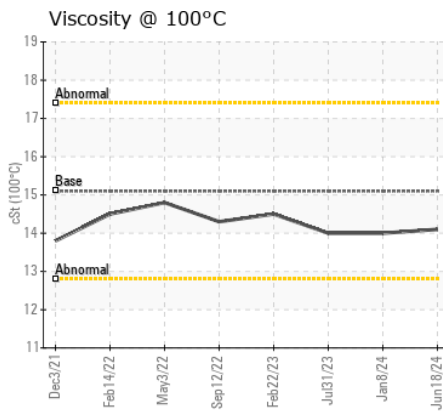
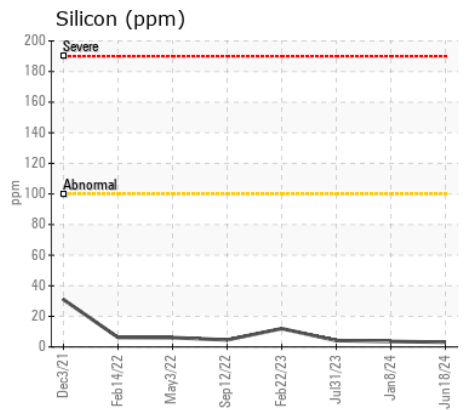
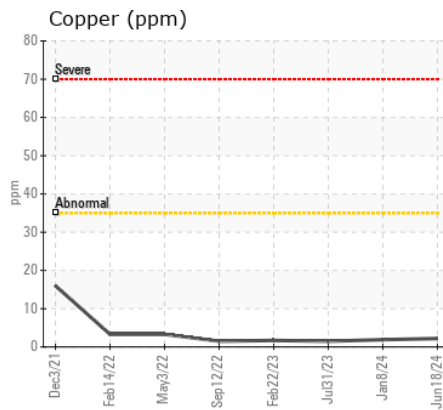
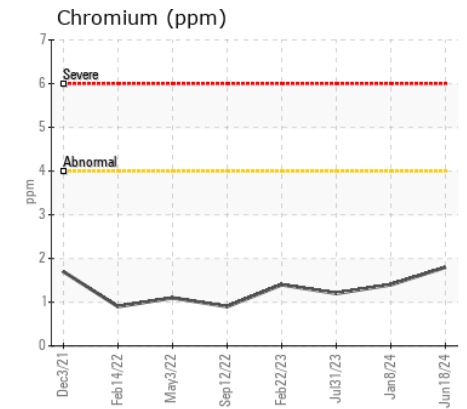
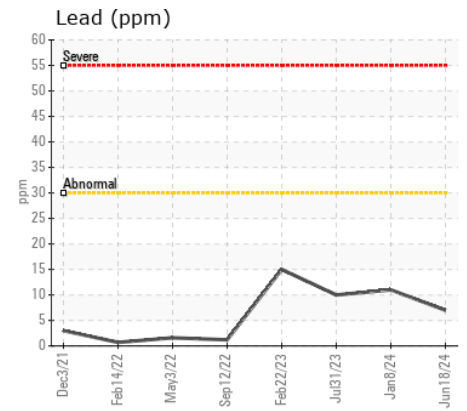
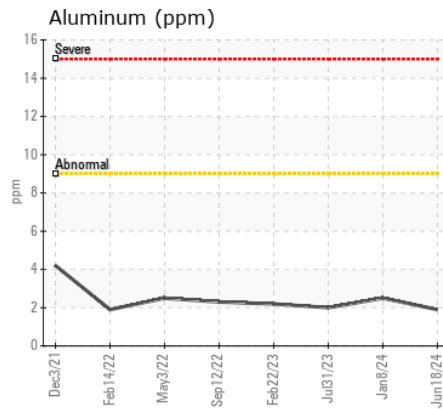
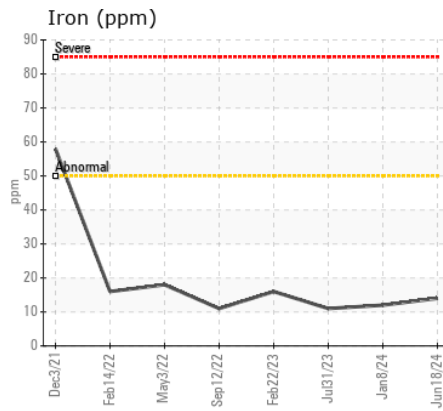
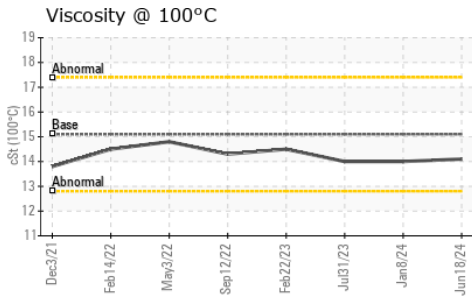
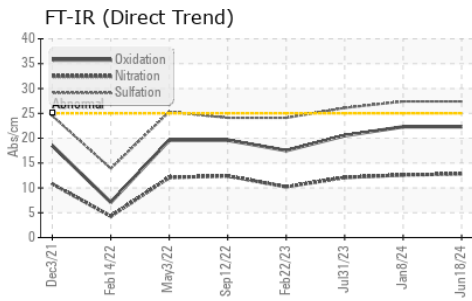
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|---------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185(m) | >+100 | 3 | 4 | 4 |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | <1 | <1 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| Soot % | % | ASTM D7844* | | 0 | 0 | 0 |
| Nitration | Abs/cm | ASTM D7624* | >20 | 12.8 | 12.6 | 12.1 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 27.4 | 27.4 | 26.1 |
| 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 | NEG | NEG | NEG |

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

| | | | | | | |
|--------------|----------|---------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185(m) | | 10 | 9 | 8 |
| Boron | ppm | ASTM D5185(m) | 50 | 6 | 6 | 8 |
| Barium | ppm | ASTM D5185(m) | 5 | <1 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 50 | 59 | 55 | 56 |
| Manganese | ppm | ASTM D5185(m) | 0 | <1 | 0 | <1 |
| Magnesium | ppm | ASTM D5185(m) | 560 | 682 | 573 | 581 |
| Calcium | ppm | ASTM D5185(m) | 1510 | 1731 | 1717 | 1659 |
| Phosphorus | ppm | ASTM D5185(m) | 780 | 773 | 750 | 797 |
| Zinc | ppm | ASTM D5185(m) | 870 | 1051 | 985 | 978 |
| Sulfur | ppm | ASTM D5185(m) | 2040 | 2144 | 2255 | 2198 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 22.3 | 22.3 | 20.5 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 15.1 | 14.1 | 14.0 | 14.0 |



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0117108
Lab Number : 02643180
Unique Number : 5800719
Test Package : MOB 1 (Additional Tests: Visual)

GFL Environmental - 209 - Hamilton
 560 Seaman Street
 Stoney Creek, ON
 CA L8E 3X7
 Contact: Fred Carleton
 fred.carleton@gflenv.com
 T: (289)925-6693
 F: (905)664-9008

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.