

Area
CGER (ATELIER DE SAINT-JEROME)

Machine Id
801115

Component
Diesel Engine

Fluid
PETRO CANADA DURON XL SYN BLEND 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | GFL0112457 | GFL0099527 | GFL0091637 |
| Sample Date | | Client Info | | 25 Mar 2024 | 14 Dec 2023 | 27 Sep 2023 |
| Machine Age | hrs | Client Info | | 14414 | 183000 | 13129 |
| Oil Age | hrs | Client Info | | 600 | 0 | 0 |
| Filter Age | hrs | Client Info | | 600 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | MARGINAL | MARGINAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|----------|-----|---------------|------|--------------|----|----|
| Iron | ppm | ASTM D5185(m) | >100 | 25 | 24 | 34 |
| Chromium | ppm | ASTM D5185(m) | >20 | <1 | 1 | 1 |
| Nickel | ppm | ASTM D5185(m) | >4 | 0 | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | >3 | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185(m) | >20 | 4 | 3 | 3 |
| Lead | ppm | ASTM D5185(m) | >40 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185(m) | >330 | 1 | 1 | 2 |
| Tin | ppm | ASTM D5185(m) | >15 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |

CONTAMINATION

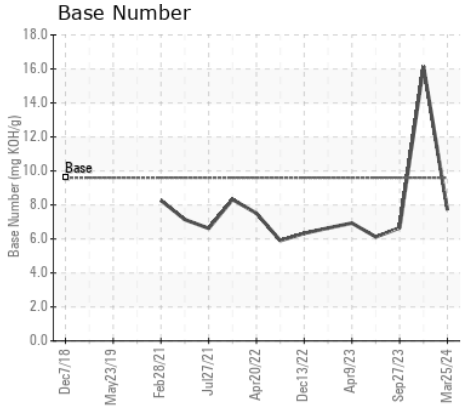
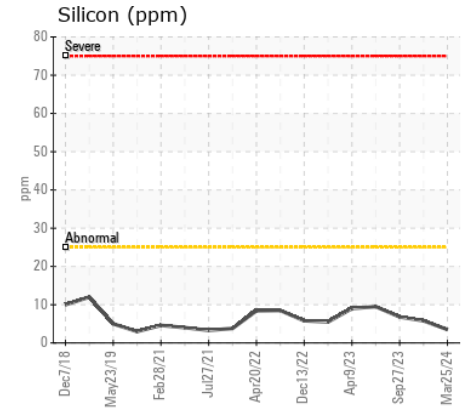
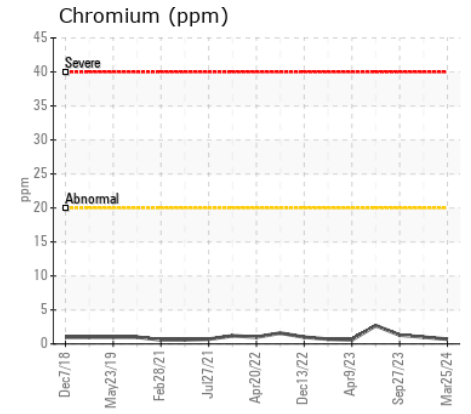
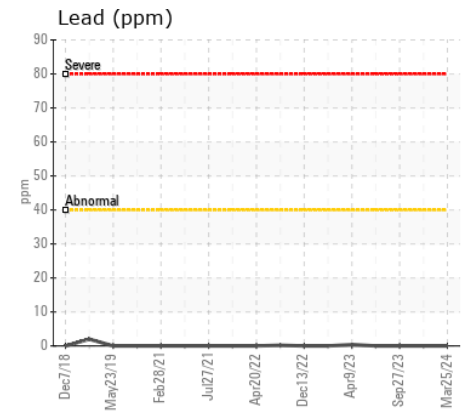
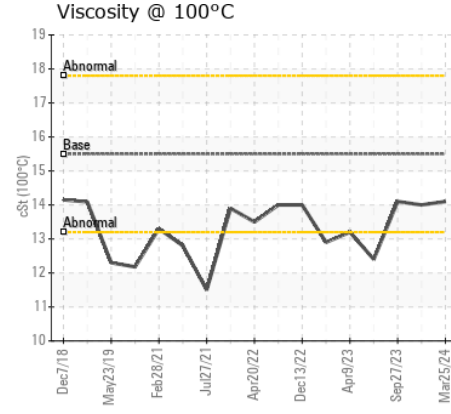
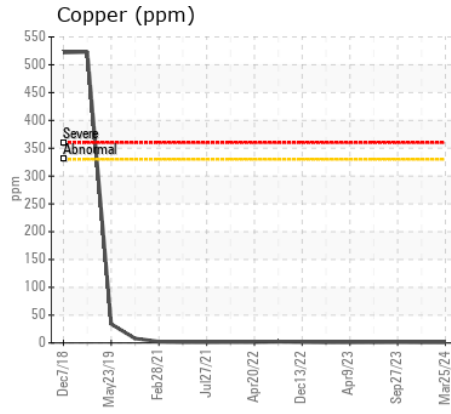
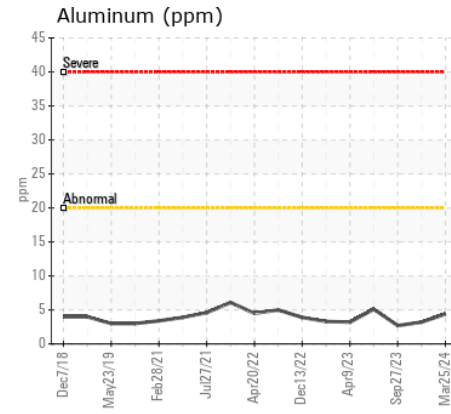
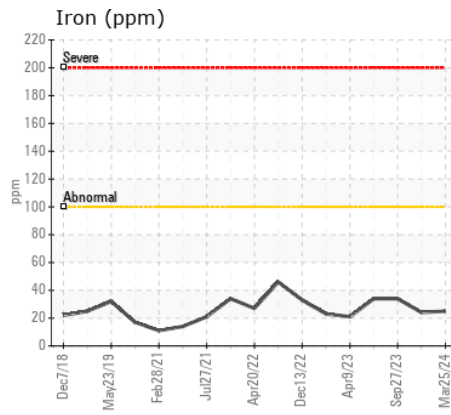
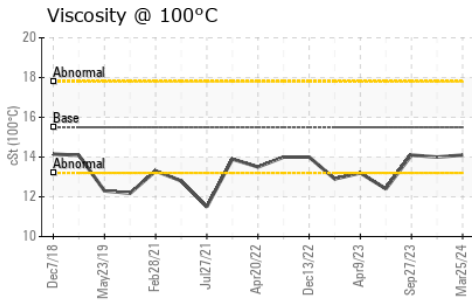
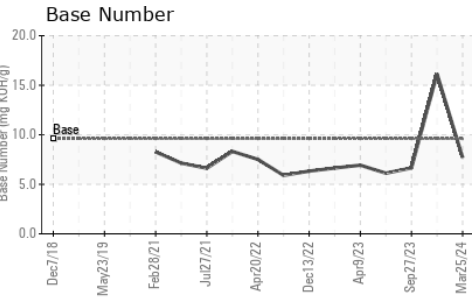
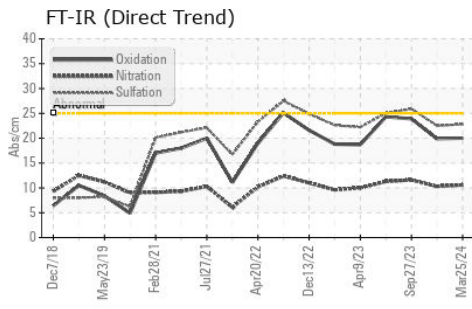
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|---------------|------|----------------|------|------|
| Silicon | ppm | ASTM D5185(m) | >25 | 4 | 6 | 7 |
| Potassium | ppm | ASTM D5185(m) | >20 | 1 | 1 | <1 |
| Fuel | | WC Method | >5 | <1.0 | ▲ 2 | ▲ 3 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | ASTM D7844* | >3 | 0.8 | 0.8 | 1.4 |
| Nitration | Abs/cm | ASTM D7624* | >20 | 10.6 | 10.3 | 11.6 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 22.8 | 22.5 | 25.9 |
| Emulsified Water | scalar | Visual* | >0.2 | 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 D5185(m) | | 8 | 8 | 8 |
| Boron | ppm | ASTM D5185(m) | 1 | 3 | 2 | 2 |
| Barium | ppm | ASTM D5185(m) | 1 | 0 | 0 | <1 |
| Molybdenum | ppm | ASTM D5185(m) | 60 | 58 | 57 | 57 |
| Manganese | ppm | ASTM D5185(m) | 1 | <1 | 0 | 0 |
| Magnesium | ppm | ASTM D5185(m) | 1010 | 927 | 919 | 889 |
| Calcium | ppm | ASTM D5185(m) | 1070 | 1057 | 1029 | 996 |
| Phosphorus | ppm | ASTM D5185(m) | 1150 | 969 | 956 | 905 |
| Zinc | ppm | ASTM D5185(m) | 1270 | 1190 | 1157 | 1126 |
| Sulfur | ppm | ASTM D5185(m) | 2060 | 2285 | 2430 | 2272 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 20.0 | 19.9 | 23.9 |
| Base Number (BN) | mg KOH/g | ASTM D2896* | 9.6 | 7.71 | 16.14 | 6.65 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 15.5 | 14.1 | 14.0 | 14.1 |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0112457
Lab Number : 02628778
Unique Number : 5761910
Test Package : MOB 2

GFL Environmental - 550 - Rocky View County
 220 Carmek Blvd
 Rocky View County, AB
 CA T1X 1X1
 Contact: GFL Calgary
 calgarymaintenance@gflenv.com
 T:
 F: (403)369-6163

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.