



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

Machine Id
7802
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | GFL0116352 | GFL0089068 | GFL0076485 |
| Sample Date | | Client Info | | 05 Apr 2024 | 20 Jul 2023 | 01 May 2023 |
| Machine Age | kms | Client Info | | 67209 | 56260 | 52491 |
| Oil Age | kms | Client Info | | 0 | 0 | 0 |
| Filter Age | kms | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | ABNORMAL | ABNORMAL |

WEAR

Metal levels are typical for a new component breaking in.

| | | | | | | |
|----------|-----|---------------|------|--------------|----|----|
| Iron | ppm | ASTM D5185(m) | >110 | 3 | 13 | 14 |
| Chromium | ppm | ASTM D5185(m) | >4 | 0 | 1 | 1 |
| Nickel | ppm | ASTM D5185(m) | >2 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >25 | <1 | 1 | 1 |
| Lead | ppm | ASTM D5185(m) | >45 | 0 | 2 | 2 |
| Copper | ppm | ASTM D5185(m) | >85 | <1 | <1 | <1 |
| Tin | ppm | ASTM D5185(m) | >4 | 0 | <1 | <1 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |

CONTAMINATION

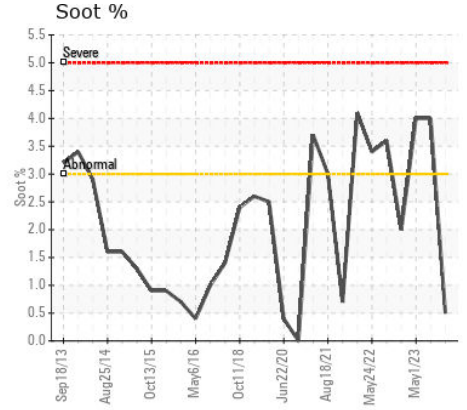
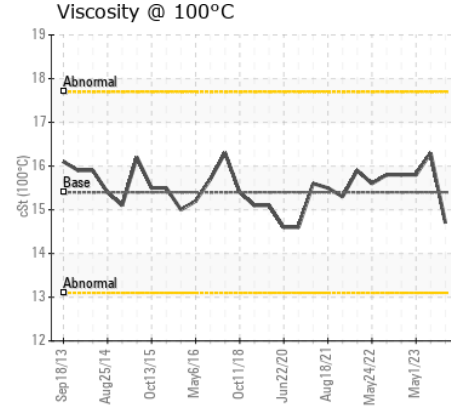
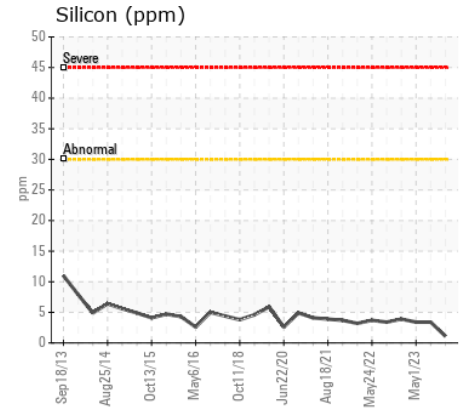
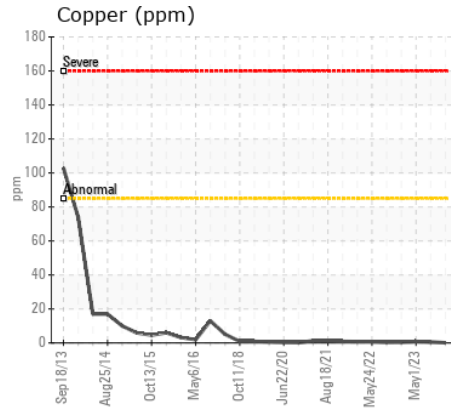
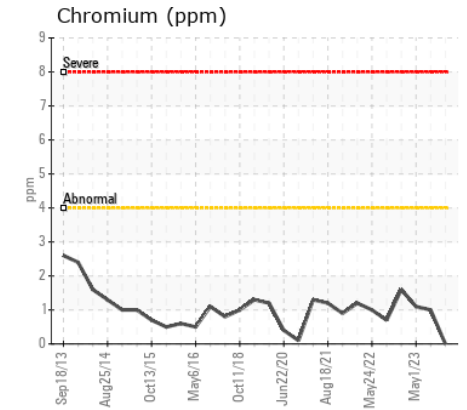
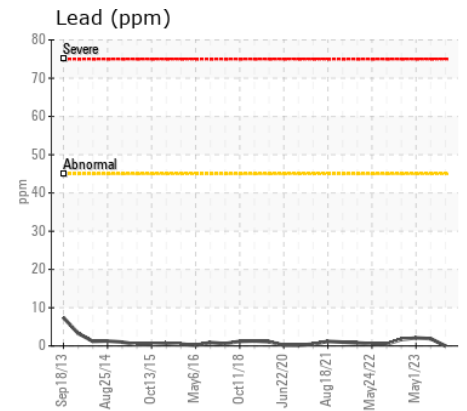
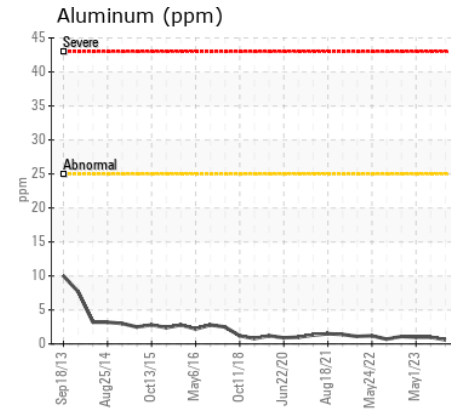
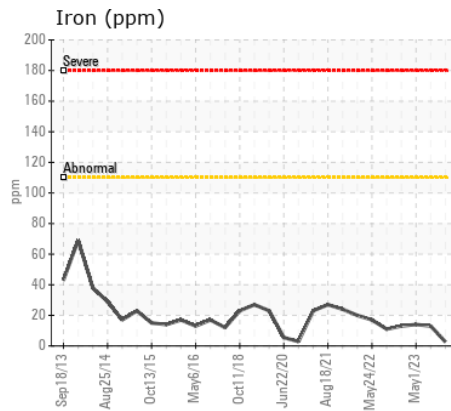
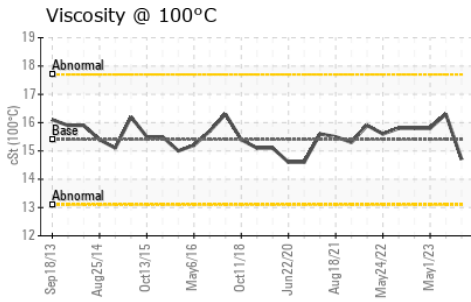
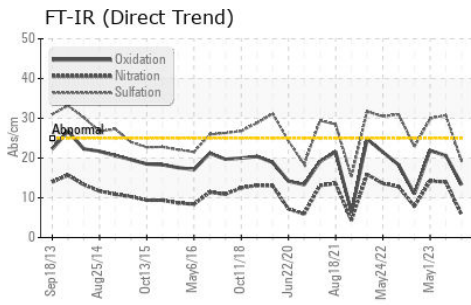
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|---------------|------|----------------|------|------|
| Silicon | ppm | ASTM D5185(m) | >30 | 1 | 3 | 3 |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | 0 | 0 |
| Fuel | | WC Method | >5 | <1.0 | 0.9 | 1.6 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | ASTM D7844* | >3 | 0.5 | ▲ 4 | ▲ 4 |
| Nitration | Abs/cm | ASTM D7624* | >20 | 5.7 | 14.0 | 14.2 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 19.2 | 30.8 | 29.9 |
| Emulsified Water | scalar | Visual* | >0.2 | NEG | NEG | NEG |

FLUID CONDITION

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

| | | | | | | |
|--------------|----------|---------------|------|-------------|------|------|
| Sodium | ppm | ASTM D5185(m) | | 3 | 12 | 15 |
| Boron | ppm | ASTM D5185(m) | 0 | 2 | 2 | 4 |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 60 | 58 | 60 | 60 |
| Manganese | ppm | ASTM D5185(m) | 0 | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185(m) | 1010 | 943 | 985 | 952 |
| Calcium | ppm | ASTM D5185(m) | 1070 | 1002 | 1037 | 1086 |
| Phosphorus | ppm | ASTM D5185(m) | 1150 | 984 | 1048 | 1077 |
| Zinc | ppm | ASTM D5185(m) | 1270 | 1160 | 1207 | 1182 |
| Sulfur | ppm | ASTM D5185(m) | 2060 | 2557 | 2442 | 2533 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 13.3 | 20.6 | 21.9 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 15.4 | 14.7 | 16.3 | 15.8 |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0116352
Lab Number : 02627255
Unique Number : 5760387
Test Package : MOB 1

GFL Environmental - 225 - COT(D2)
 20 Brydon Drive
 Etobicoke, ON
 CA M9W 5R6
 Contact: Rick Philip
 rphilip@gflenv.com
 T: (416)745-8080
 F:

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.