



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

Machine Id
7771
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (40 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | GFL0113184 | GFL0093638 | GFL0085266 |
| Sample Date | | Client Info | | 28 Feb 2024 | 11 Sep 2023 | 07 Jun 2023 |
| Machine Age | hrs | Client Info | | 27836 | 26626 | 207347 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| 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) | >90 | 10 | 22 | 10 |
| Chromium | ppm | ASTM D5185(m) | >20 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185(m) | >2 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185(m) | >2 | 0 | 0 | <1 |
| Silver | ppm | ASTM D5185(m) | >2 | 0 | <1 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >20 | 1 | 2 | 1 |
| Lead | ppm | ASTM D5185(m) | >40 | 1 | 3 | <1 |
| Copper | ppm | ASTM D5185(m) | >330 | <1 | <1 | <1 |
| Tin | ppm | ASTM D5185(m) | >15 | 0 | <1 | <1 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |

CONTAMINATION

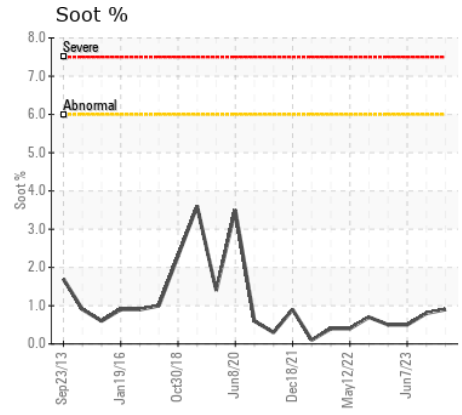
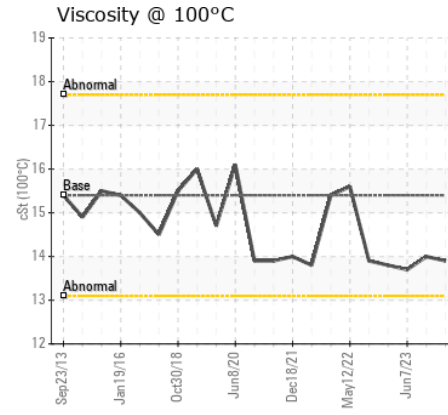
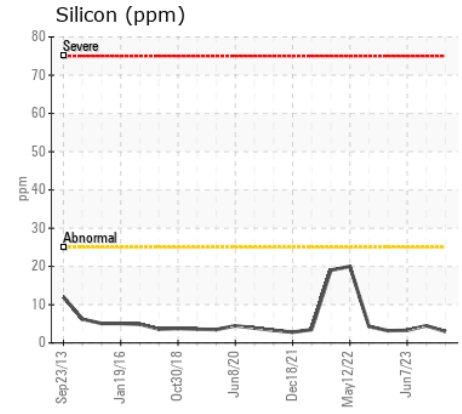
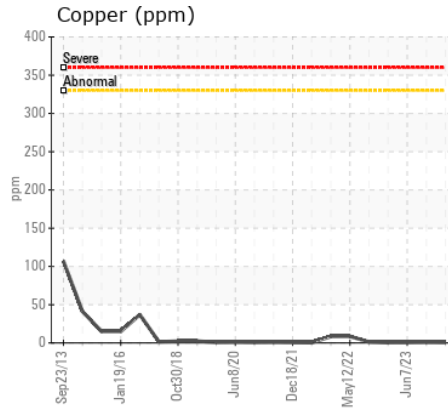
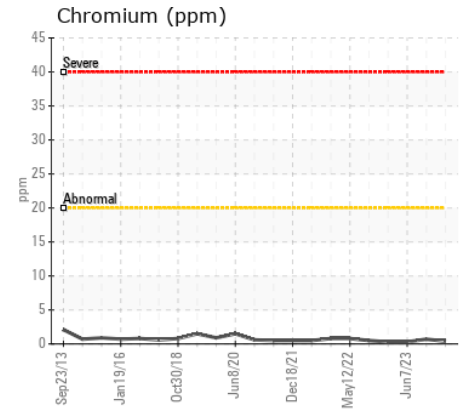
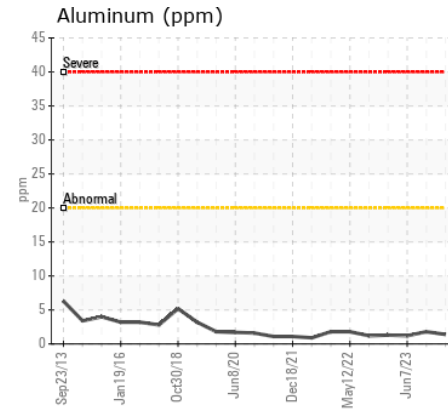
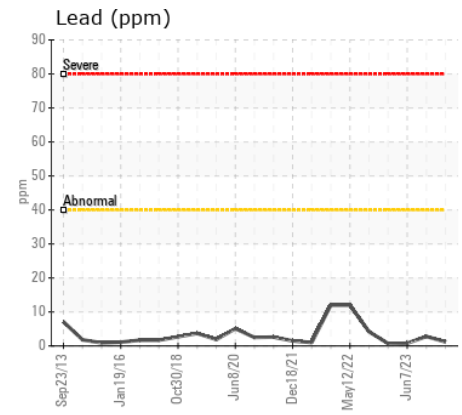
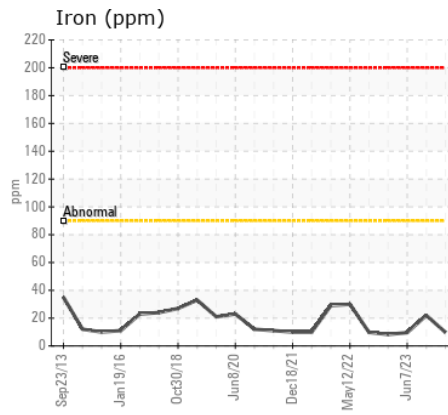
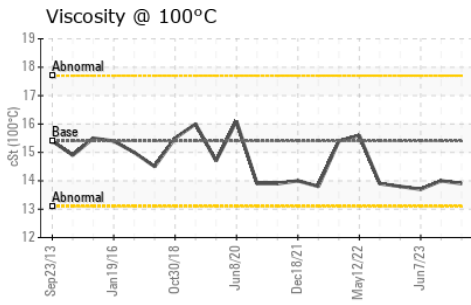
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|---------------|------|----------------|------|------|
| Silicon | ppm | ASTM D5185(m) | >25 | 3 | 4 | 3 |
| Potassium | ppm | ASTM D5185(m) | >20 | 1 | 3 | <1 |
| Fuel | | WC Method | >3.0 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | ASTM D7844* | >6 | 0.9 | 0.8 | 0.5 |
| Nitration | Abs/cm | ASTM D7624* | >20 | 8.6 | 9.1 | 7.3 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 21.3 | 21.7 | 20.4 |
| 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) | | 9 | 24 | 10 |
| Boron | ppm | ASTM D5185(m) | 0 | 6 | 3 | 4 |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 60 | 59 | 63 | 63 |
| Manganese | ppm | ASTM D5185(m) | 0 | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185(m) | 1010 | 937 | 1024 | 999 |
| Calcium | ppm | ASTM D5185(m) | 1070 | 1056 | 1090 | 1134 |
| Phosphorus | ppm | ASTM D5185(m) | 1150 | 1005 | 1111 | 1151 |
| Zinc | ppm | ASTM D5185(m) | 1270 | 1170 | 1253 | 1245 |
| Sulfur | ppm | ASTM D5185(m) | 2060 | 2652 | 2611 | 2716 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 16.3 | 18.0 | 15.5 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 15.4 | 13.9 | 14.0 | 13.7 |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0113184 **Received** : 04 Mar 2024
Lab Number : 02619466 **Tested** : 04 Mar 2024
Unique Number : 5736576 **Diagnosed** : 04 Mar 2024 - Wes Davis
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.