



Area
GFL207
Machine Id
800018
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (20 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | GFL0110655 | GFL0089008 | GFL0082965 |
| Sample Date | | Client Info | | 15 Feb 2024 | 18 Sep 2023 | 11 Jul 2023 |
| Machine Age | hrs | Client Info | | 18979 | 17800 | 17225 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | N/A | N/A | N/A |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | NORMAL | NORMAL | MARGINAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|---------------|------|--------------|-----|-----|
| Iron | ppm | ASTM D5185(m) | >75 | 29 | 30 | 33 |
| Chromium | ppm | ASTM D5185(m) | >5 | <1 | <1 | 1 |
| Nickel | ppm | ASTM D5185(m) | >4 | <1 | 0 | 0 |
| Titanium | ppm | ASTM D5185(m) | >2 | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >15 | 2 | 2 | 1 |
| Lead | ppm | ASTM D5185(m) | >25 | 0 | 0 | <1 |
| Copper | ppm | ASTM D5185(m) | >100 | <1 | <1 | <1 |
| Tin | ppm | ASTM D5185(m) | >4 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| White Metal | scalar | Visual* | NONE | NONE | --- | --- |
| Yellow Metal | scalar | Visual* | NONE | NONE | --- | --- |

CONTAMINATION

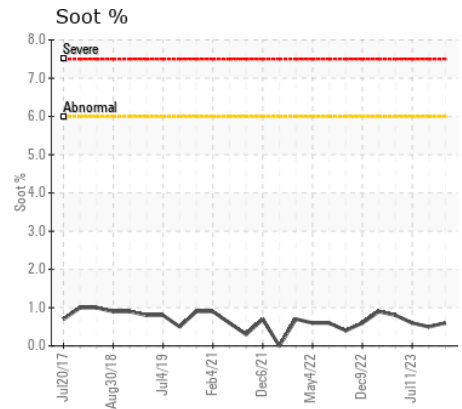
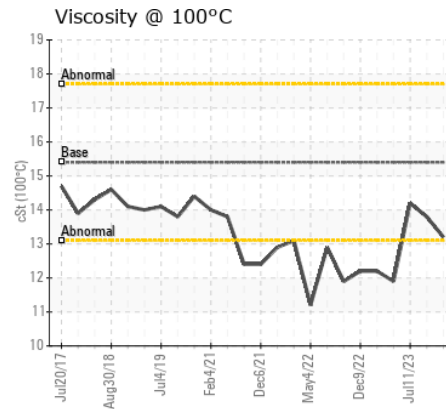
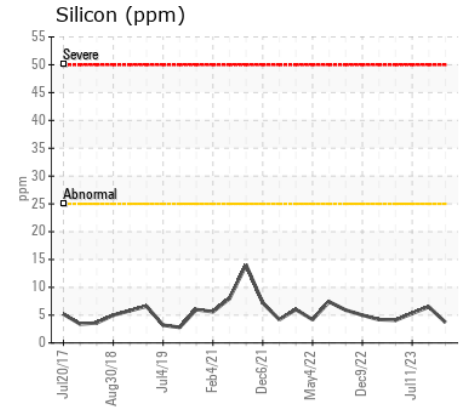
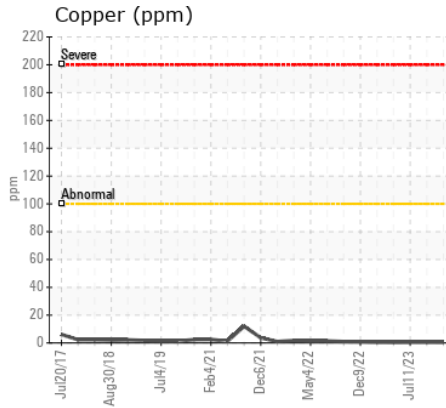
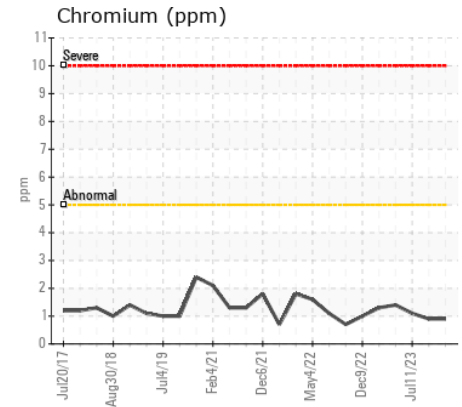
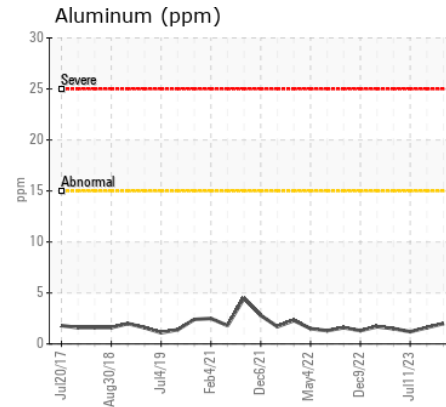
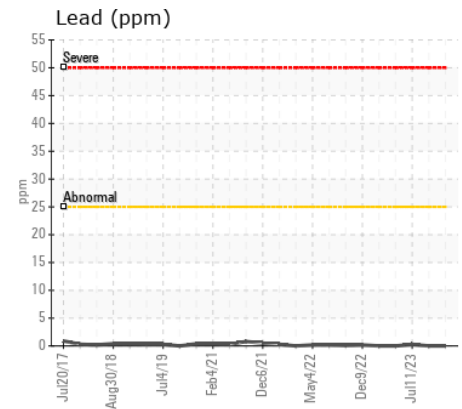
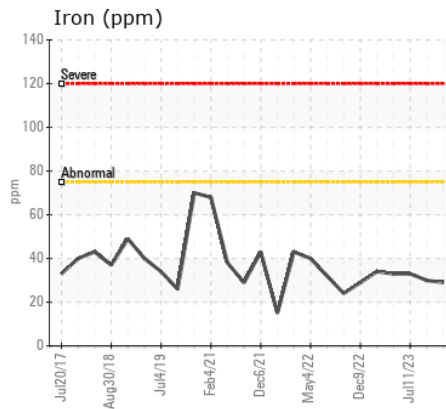
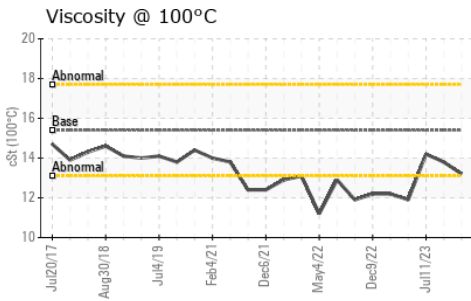
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|---------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185(m) | >25 | 4 | 6 | 5 |
| Potassium | ppm | ASTM D5185(m) | >20 | 1 | 2 | 1 |
| Fuel | | WC Method | >3.0 | <1.0 | <1.0 | ▲ 2.8 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | ASTM D7844* | >6 | 0.6 | 0.5 | 0.6 |
| Nitration | Abs/cm | ASTM D7624* | >20 | 12.0 | 9.9 | 11.2 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 24.1 | 22.8 | 24.5 |
| 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* | >0.2 | NEG | NEG | NEG |

FLUID CONDITION

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

| | | | | | | |
|--------------|----------|---------------|------|-------------|------|------|
| Sodium | ppm | ASTM D5185(m) | | 7 | 9 | 8 |
| Boron | ppm | ASTM D5185(m) | 0 | 2 | 2 | 4 |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 60 | 54 | 57 | 58 |
| Manganese | ppm | ASTM D5185(m) | 0 | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185(m) | 1010 | 874 | 921 | 951 |
| Calcium | ppm | ASTM D5185(m) | 1070 | 978 | 995 | 986 |
| Phosphorus | ppm | ASTM D5185(m) | 1150 | 915 | 992 | 1020 |
| Zinc | ppm | ASTM D5185(m) | 1270 | 1085 | 1135 | 1167 |
| Sulfur | ppm | ASTM D5185(m) | 2060 | 2367 | 2334 | 2374 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 23.9 | 22.3 | 24.8 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 15.4 | 13.2 | 13.8 | 14.2 |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0110655
Lab Number : 02616606
Unique Number : 5733716
Test Package : MOB 1 (Additional Tests: Visual)

GFL Environmental - 227 - Pickering MTCE
 1034 Toy Ave
 Pickering, ON
 CA L1W 3P1
 Contact: Maintenance

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.

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F: