

Machine Id
1520
Component
Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (24 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | PC0082788 | PC0080273 | PC0076762 |
| Sample Date | | Client Info | | 07 Mar 2024 | 09 Jan 2024 | 22 Nov 2023 |
| Machine Age | kms | Client Info | | 531734 | 548073 | 536483 |
| Oil Age | kms | Client Info | | 13197 | 11590 | 12860 |
| Filter Age | kms | Client Info | | 13197 | 11590 | 12860 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | ABNORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|---------------|------|--------------|-----|-----|
| Iron | ppm | ASTM D5185(m) | >100 | 20 | 28 | 43 |
| Chromium | ppm | ASTM D5185(m) | >20 | <1 | 1 | 2 |
| 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 | 2 | 3 | 3 |
| Lead | ppm | ASTM D5185(m) | >40 | 0 | <1 | <1 |
| Copper | ppm | ASTM D5185(m) | >330 | 2 | 1 | 2 |
| Tin | ppm | ASTM D5185(m) | >15 | 0 | <1 | 0 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| White Metal | scalar | Visual* | NONE | NONE | --- | --- |
| Yellow Metal | scalar | Visual* | NONE | NONE | --- | --- |

CONTAMINATION

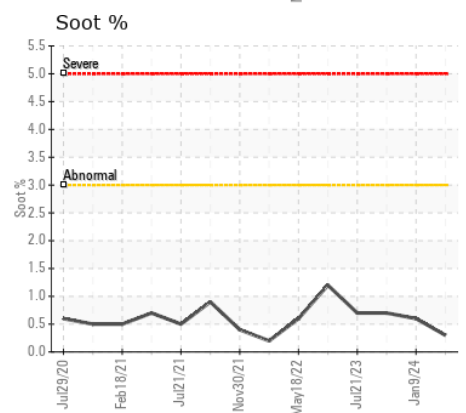
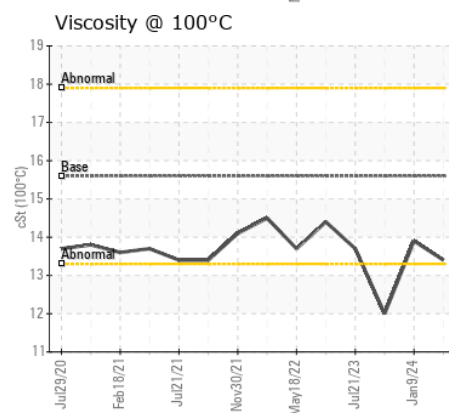
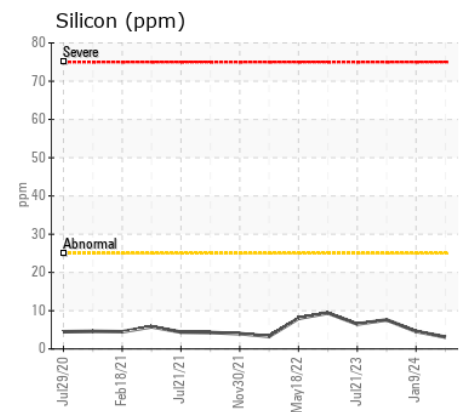
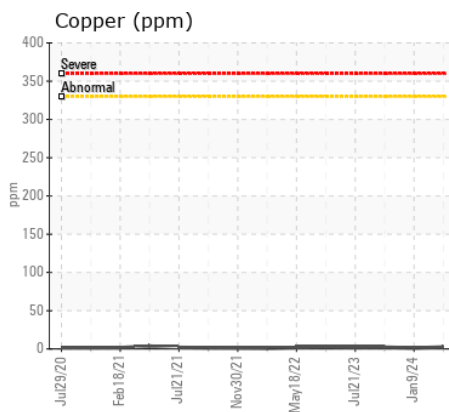
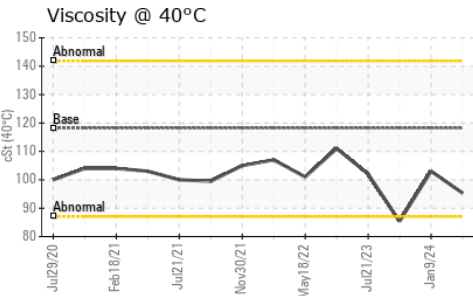
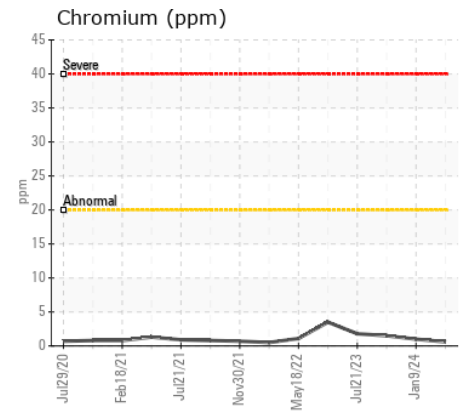
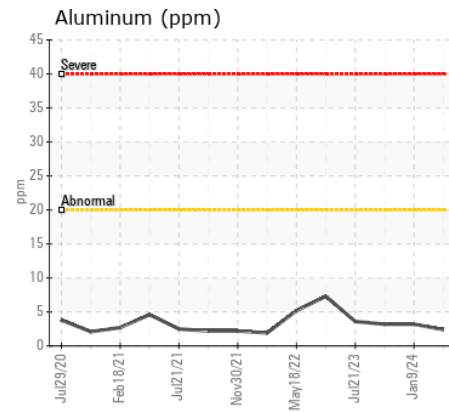
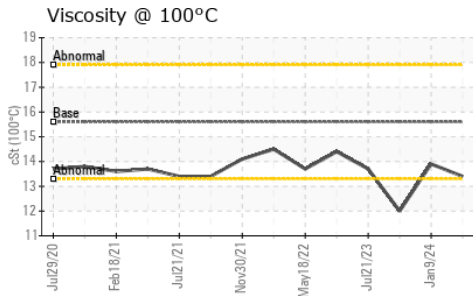
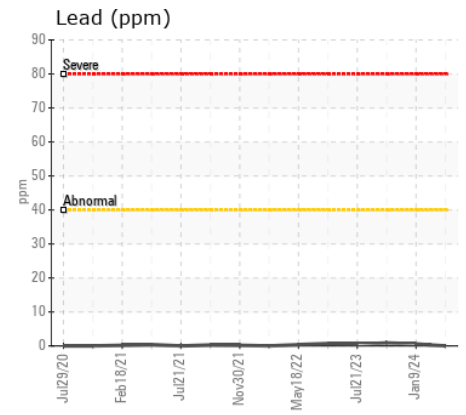
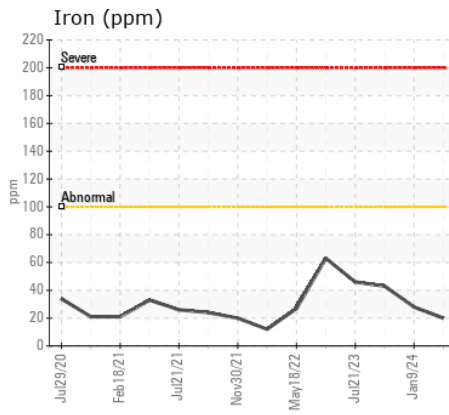
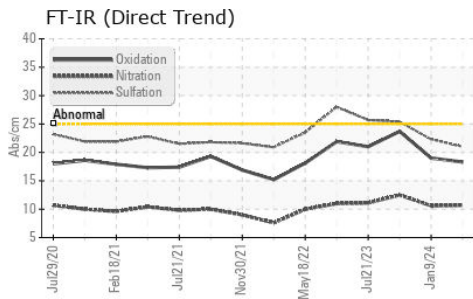
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|---------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185(m) | >25 | 3 | 5 | 8 |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | 1 | 2 |
| Fuel | | WC Method | >5 | <1.0 | 1.3 | ▲ 6.9 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | ASTM D7844* | >3 | 0.3 | 0.6 | 0.7 |
| Nitration | Abs/cm | ASTM D7624* | >20 | 10.7 | 10.6 | 12.5 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 21.0 | 22.3 | 25.4 |
| Silt | scalar | Visual* | NONE | NONE | --- | --- |
| Debris | scalar | Visual* | NONE | VLITE | --- | --- |
| 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) | | 5 | 7 | 9 |
| Boron | ppm | ASTM D5185(m) | 0 | 6 | 4 | 11 |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 60 | 58 | 59 | 48 |
| Manganese | ppm | ASTM D5185(m) | 0 | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185(m) | 1010 | 934 | 945 | 739 |
| Calcium | ppm | ASTM D5185(m) | 1070 | 1147 | 1131 | 1260 |
| Phosphorus | ppm | ASTM D5185(m) | 1150 | 971 | 1030 | 941 |
| Zinc | ppm | ASTM D5185(m) | 1270 | 1161 | 1230 | 1139 |
| Sulfur | ppm | ASTM D5185(m) | 2060 | 2546 | 2620 | 2310 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 18.3 | 19.0 | 23.7 |
| Visc @ 40°C | cSt | ASTM D7279(m) | 118.2 | 95.3 | 103 | ▲ 85.4 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 15.6 | 13.4 | 13.9 | ▲ 12.0 |
| Viscosity Index (VI) | Scale | ASTM D2270* | 139 | 140 | 136 | 133 |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0082788
Lab Number : 02626861
Unique Number : 5759993
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)
Received : 05 Apr 2024
Tested : 05 Apr 2024
Diagnosed : 05 Apr 2024 - Wes Davis

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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.