



OIL ANALYSIS REPORT

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

Machine Id
1253
Component
Rear Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- LTR)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | WC0887381 | WC0873843 | WC0865004 |
| Sample Date | | Client Info | | 05 Jan 2024 | 22 Nov 2023 | 03 Oct 2023 |
| Machine Age | hrs | Client Info | | 33225 | 18267 | 17741 |
| Oil Age | hrs | Client Info | | 522 | 526 | 0 |
| Filter Age | hrs | Client Info | | 522 | 526 | 0 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | N/A | Changed | Changed |
| Sample Status | | | | NORMAL | MARGINAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|----------|-----|---------------|------|--------------|----|----|
| Iron | ppm | ASTM D5185(m) | >100 | 15 | 8 | 19 |
| Chromium | ppm | ASTM D5185(m) | >20 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185(m) | >4 | <1 | <1 | 0 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | >3 | 0 | <1 | <1 |
| Aluminum | ppm | ASTM D5185(m) | >20 | 1 | <1 | 1 |
| Lead | ppm | ASTM D5185(m) | >40 | <1 | <1 | <1 |
| Copper | ppm | ASTM D5185(m) | >330 | <1 | <1 | 1 |
| Tin | ppm | ASTM D5185(m) | >15 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |

CONTAMINATION

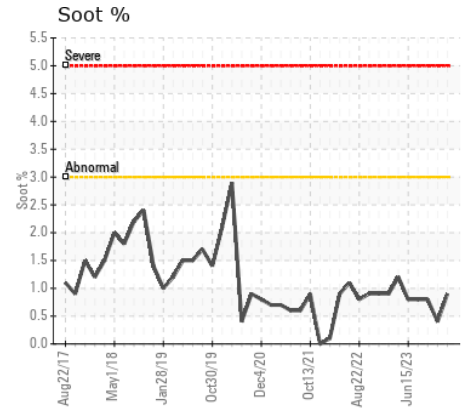
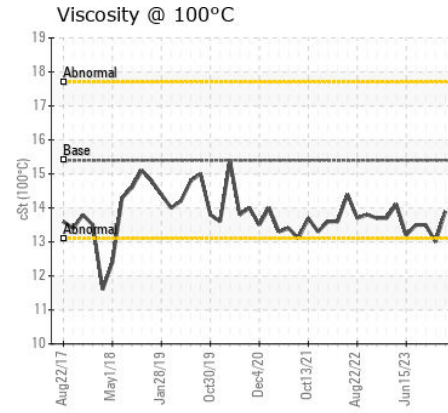
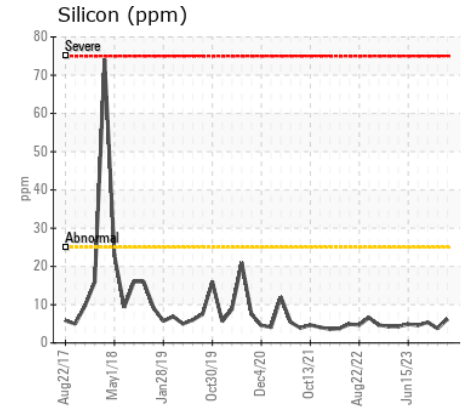
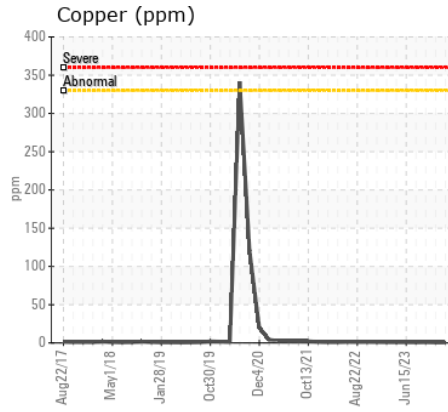
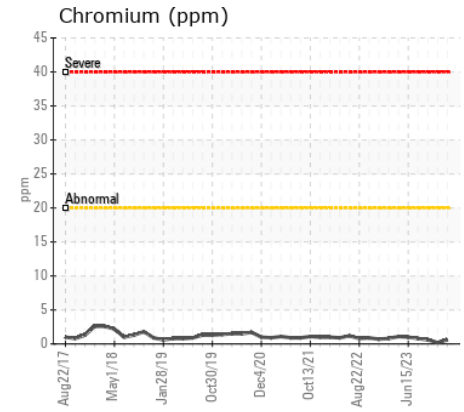
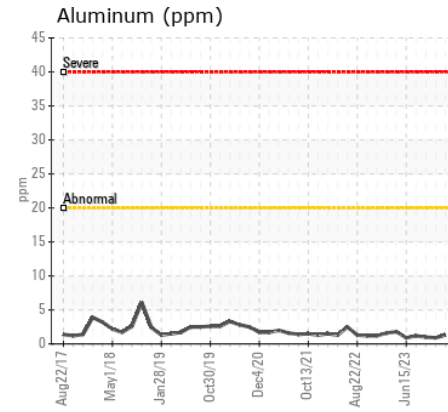
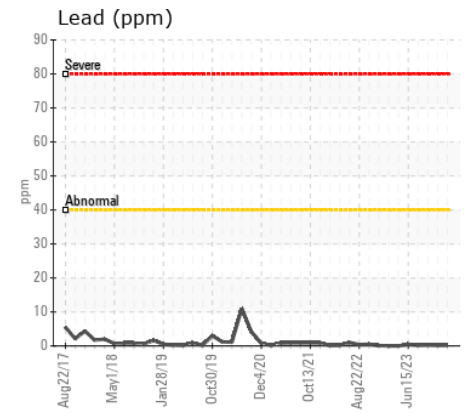
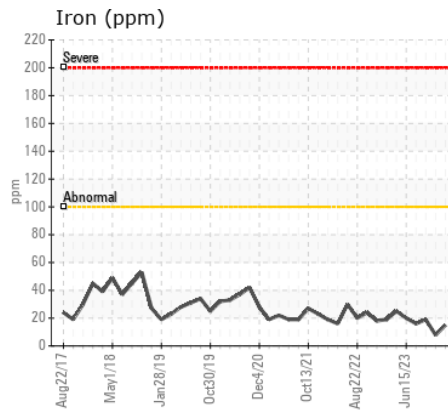
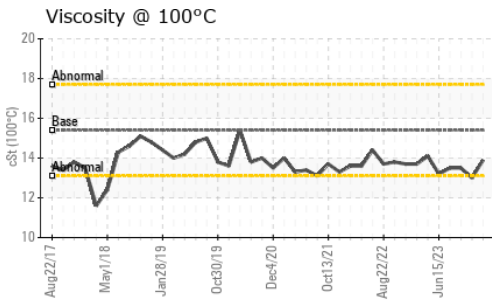
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|---------------|------|----------------|-------|------|
| Silicon | ppm | ASTM D5185(m) | >25 | 6 | 4 | 5 |
| Potassium | ppm | ASTM D5185(m) | >20 | 0 | 0 | 18 |
| Fuel | | WC Method | >5 | <1.0 | ▲ 2.8 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | 0.0 |
| Soot % | % | ASTM D7844* | >3 | 0.9 | 0.4 | 0.8 |
| Nitration | Abs/cm | ASTM D7624* | >20 | 11.3 | 8.6 | 12.0 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 25.6 | 24.4 | 29.3 |
| 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) | | 2 | 2 | 4 |
| Boron | ppm | ASTM D5185(m) | 0 | 2 | 3 | 2 |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | <1 | <1 |
| Molybdenum | ppm | ASTM D5185(m) | 60 | 58 | 58 | 59 |
| Manganese | ppm | ASTM D5185(m) | 0 | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185(m) | 1010 | 939 | 922 | 930 |
| Calcium | ppm | ASTM D5185(m) | 1070 | 1041 | 1014 | 1043 |
| Phosphorus | ppm | ASTM D5185(m) | 1150 | 976 | 945 | 940 |
| Zinc | ppm | ASTM D5185(m) | 1270 | 1145 | 1151 | 1147 |
| Sulfur | ppm | ASTM D5185(m) | 2060 | 2593 | 2456 | 2407 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 25.6 | 25.8 | 32.9 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 15.4 | 13.9 | 13.0 | 13.5 |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0887381 **Received** : 16 Jan 2024
Lab Number : 02608883 **Diagnosed** : 16 Jan 2024
Unique Number : 5709969 **Diagnostician** : Kevin Marson
Test Package : MOB 1

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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.