



OIL ANALYSIS REPORT

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

Machine Id
ST262
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON UHP 5W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | PC0071598 | PC0082043 | PC0075776 |
| Sample Date | | Client Info | | 16 Apr 2024 | 01 Dec 2023 | 15 May 2023 |
| Machine Age | hrs | Client Info | | 3289 | 3112 | 2848 |
| Oil Age | hrs | Client Info | | 0 | 250 | 0 |
| Filter Age | hrs | Client Info | | 0 | 250 | 0 |
| Oil Changed | | Client Info | | Changed | Changed | N/A |
| Filter Changed | | Client Info | | Changed | Changed | N/A |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|---------------|------|--------------|-----|------|
| Iron | ppm | ASTM D5185(m) | >100 | 6 | 5 | 12 |
| Chromium | ppm | ASTM D5185(m) | >20 | 0 | 0 | <1 |
| Nickel | ppm | ASTM D5185(m) | >4 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | <1 |
| Silver | ppm | ASTM D5185(m) | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >20 | 2 | 1 | 2 |
| Lead | ppm | ASTM D5185(m) | >40 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185(m) | >330 | <1 | <1 | 1 |
| Tin | ppm | ASTM D5185(m) | >15 | 0 | 0 | <1 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| White Metal | scalar | Visual* | NONE | NONE | --- | NONE |
| Yellow Metal | scalar | Visual* | NONE | NONE | --- | NONE |

CONTAMINATION

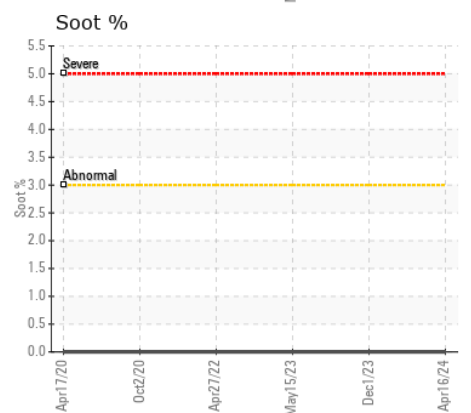
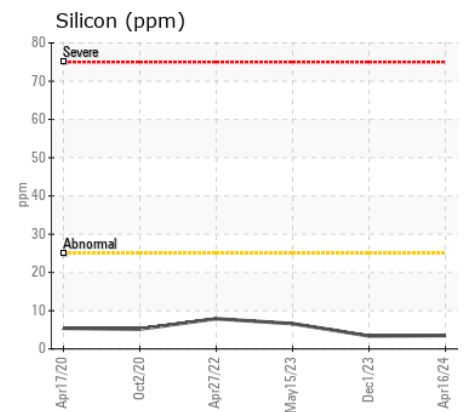
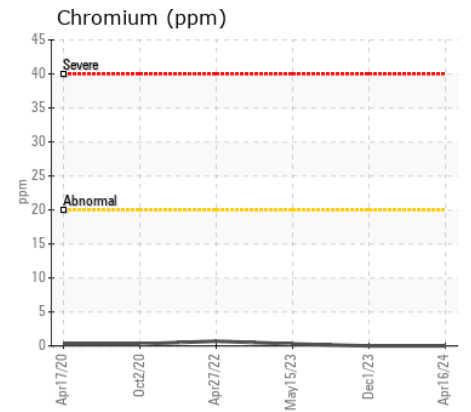
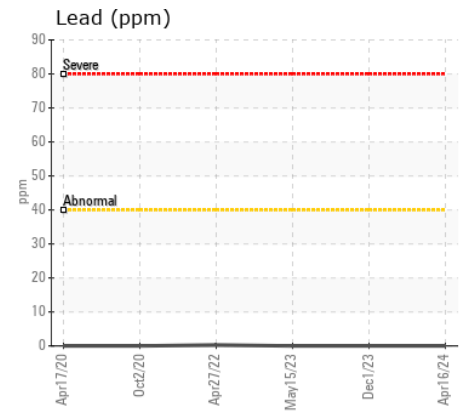
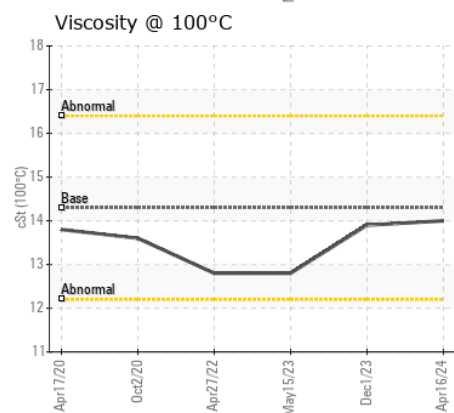
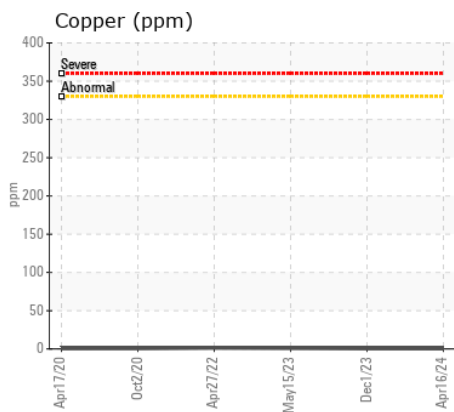
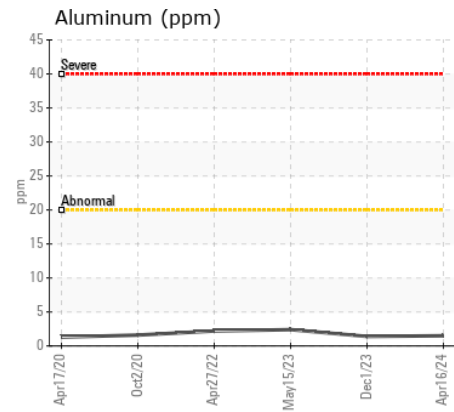
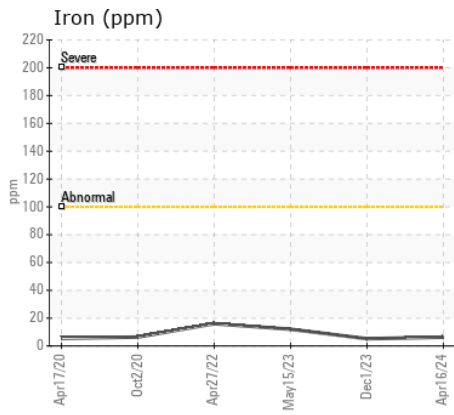
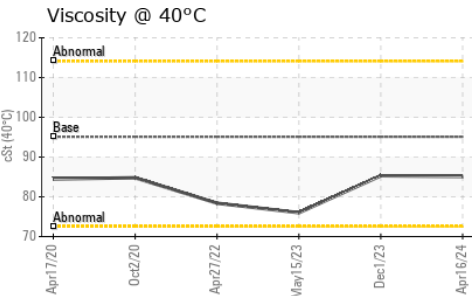
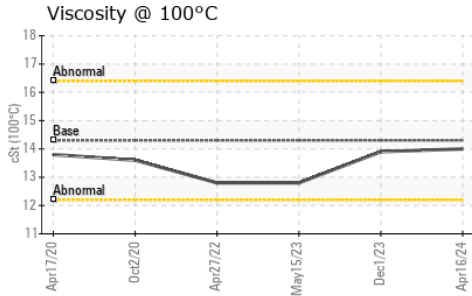
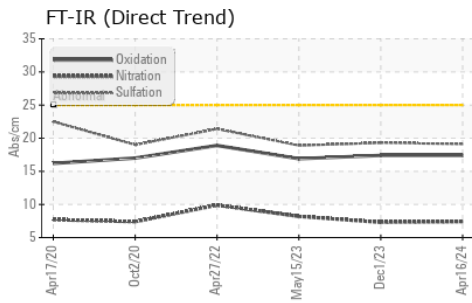
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|---------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185(m) | >25 | 4 | 3 | 7 |
| Potassium | ppm | ASTM D5185(m) | >20 | 0 | <1 | 0 |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | ASTM D7844* | >3 | 0 | 0 | 0 |
| Nitration | Abs/cm | ASTM D7624* | >20 | 7.4 | 7.3 | 8.2 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 19.1 | 19.3 | 18.9 |
| Silt | scalar | Visual* | NONE | NONE | --- | NONE |
| Debris | scalar | Visual* | NONE | NONE | --- | NONE |
| Sand/Dirt | scalar | Visual* | NONE | NONE | --- | NONE |
| Appearance | scalar | Visual* | NORML | 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) | | 4 | 4 | 4 |
| Boron | ppm | ASTM D5185(m) | 65 | 54 | 50 | 48 |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 65 | 56 | 53 | 59 |
| Manganese | ppm | ASTM D5185(m) | 0 | 0 | 0 | <1 |
| Magnesium | ppm | ASTM D5185(m) | 1160 | 1078 | 1050 | 1142 |
| Calcium | ppm | ASTM D5185(m) | 820 | 808 | 768 | 890 |
| Phosphorus | ppm | ASTM D5185(m) | 1160 | 951 | 948 | 1103 |
| Zinc | ppm | ASTM D5185(m) | 1260 | 1128 | 1120 | 1242 |
| Sulfur | ppm | ASTM D5185(m) | 3000 | 2613 | 2756 | 2859 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 17.4 | 17.4 | 16.9 |
| Visc @ 40°C | cSt | ASTM D7279(m) | 95.1 | 85.1 | 85.3 | 76.0 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 14.3 | 14.0 | 13.9 | 12.8 |
| Viscosity Index (VI) | Scale | ASTM D2270* | 169 | 169 | 167 | 169 |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0071598 **Received** : 23 Apr 2024
Lab Number : 02630914 **Tested** : 23 Apr 2024
Unique Number : 5772067 **Diagnosed** : 23 Apr 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

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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.