



Machine Id
MACK 75
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (36 LTR)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | PC0083437 | PC0081931 | PC0071054 |
| Sample Date | | Client Info | | 13 May 2024 | 21 Sep 2023 | 17 Feb 2023 |
| Machine Age | kms | Client Info | | 1087020 | 1051520 | 1019722 |
| Oil Age | kms | Client Info | | 35500 | 31798 | 35589 |
| Filter Age | kms | Client Info | | 35500 | 31798 | 35589 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | ABNORMAL | ABNORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|----------|-----|---------------|------|----------|----|----|
| Iron | ppm | ASTM D5185(m) | >120 | 5 | 4 | 3 |
| Chromium | ppm | ASTM D5185(m) | >20 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185(m) | >5 | 0 | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | >2 | 0 | 0 | <1 |
| Silver | ppm | ASTM D5185(m) | >2 | 0 | <1 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >20 | 2 | 2 | 1 |
| Lead | ppm | ASTM D5185(m) | >40 | 0 | 1 | <1 |
| Copper | ppm | ASTM D5185(m) | >330 | 5 | 2 | 3 |
| Tin | ppm | ASTM D5185(m) | >15 | 0 | 0 | <1 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |

CONTAMINATION

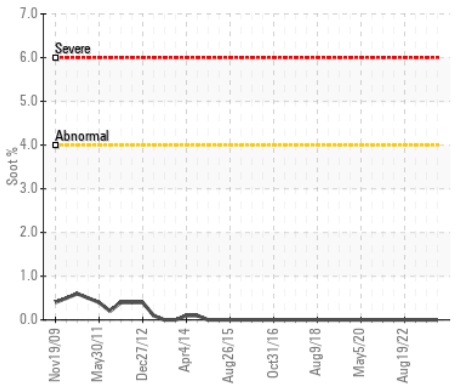
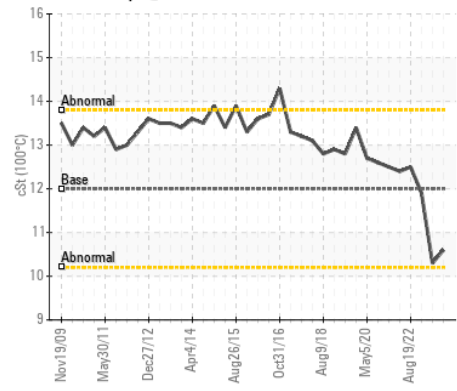
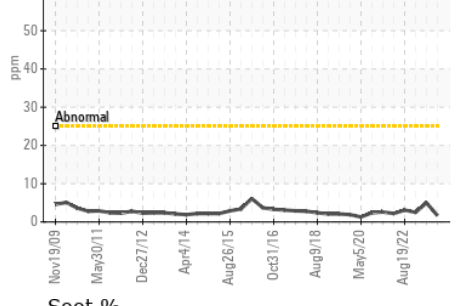
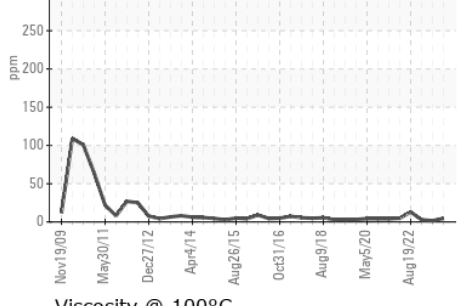
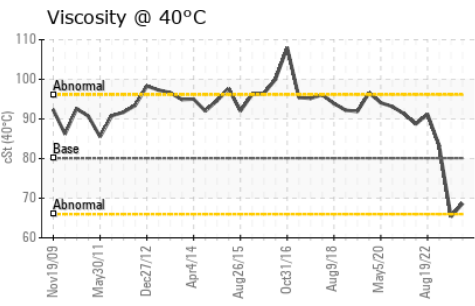
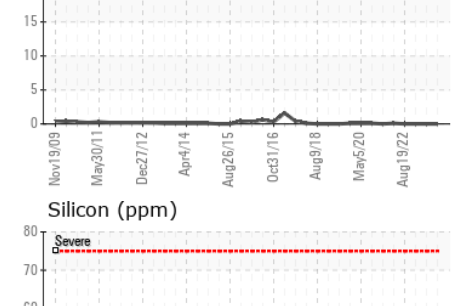
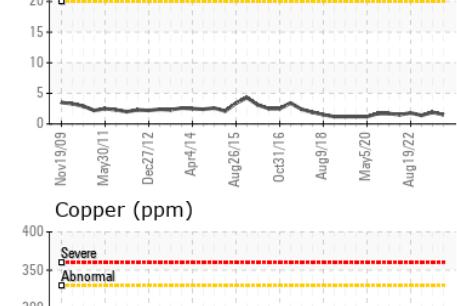
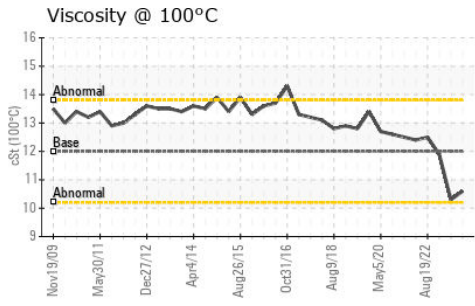
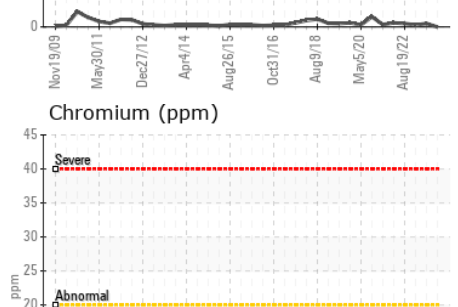
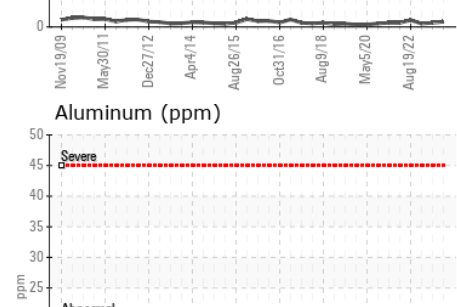
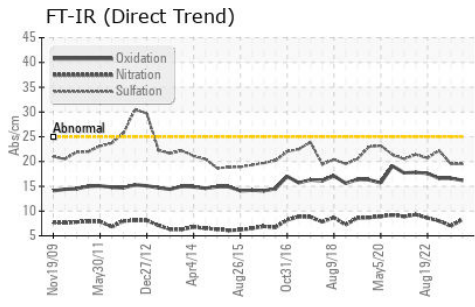
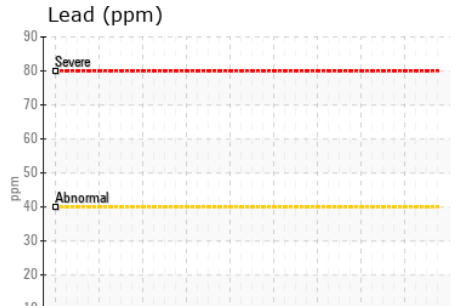
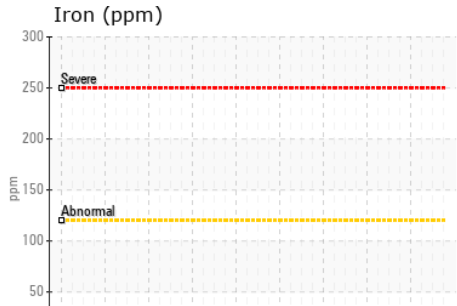
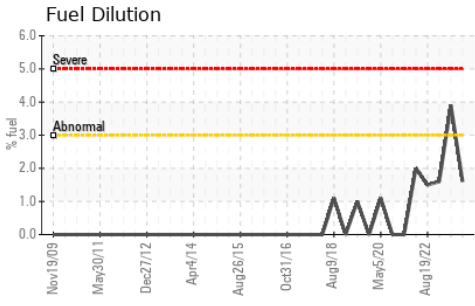
Light fuel dilution occurring. No other contaminants were detected in the oil.

| | | | | | | |
|------------------|----------|---------------|------|--------------|-------|------|
| Silicon | ppm | ASTM D5185(m) | >25 | 2 | 5 | 2 |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | 0 | 0 |
| Fuel | % | ASTM D7593* | >3.0 | 1.6 | ▲ 3.9 | 1.6 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | ASTM D7844* | >4 | 0 | 0 | 0 |
| Nitration | Abs/cm | ASTM D7624* | >20 | 8.3 | 7.0 | 8.0 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 19.5 | 19.5 | 22.2 |
| 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) | 2 | 4 | 2 | 4 |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | <1 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 50 | 59 | 57 | 61 |
| Manganese | ppm | ASTM D5185(m) | 0 | 0 | 0 | <1 |
| Magnesium | ppm | ASTM D5185(m) | 950 | 956 | 925 | 986 |
| Calcium | ppm | ASTM D5185(m) | 1050 | 1047 | 1002 | 1118 |
| Phosphorus | ppm | ASTM D5185(m) | 995 | 985 | 988 | 1098 |
| Zinc | ppm | ASTM D5185(m) | 1180 | 1168 | 1170 | 1202 |
| Sulfur | ppm | ASTM D5185(m) | 2600 | 2478 | 2515 | 2707 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 16.2 | 16.6 | 16.6 |
| Visc @ 40°C | cSt | ASTM D7279(m) | 80.1 | 68.7 | ▲ 65.3 | ▲ 83.2 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 12.00 | 10.6 | ▲ 10.3 | ▲ 11.9 |
| Viscosity Index (VI) | Scale | ASTM D2270* | 144 | 142 | 144 | 136 |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0083437
Lab Number : 02635464
Unique Number : 5776617
Test Package : MOB 1 (Additional Tests: KV40, PercentFuel, VI)

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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.