



OIL ANALYSIS REPORT

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

Area
MICHAUDVILLE

Machine Id
1222

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

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 | | PC0075918 | PC0077396 | PC0072965 |
| Sample Date | | Client Info | | 07 Jan 2024 | 17 Oct 2023 | 24 Jul 2023 |
| Machine Age | hrs | Client Info | | 10098 | 9687 | 9198 |
| 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 | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|----------|-----|---------------|------|--------------|----|----|
| Iron | ppm | ASTM D5185(m) | >100 | 6 | 6 | 6 |
| Chromium | ppm | ASTM D5185(m) | >20 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185(m) | >4 | <1 | 0 | 0 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | >3 | 0 | <1 | 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 | 0 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |

CONTAMINATION

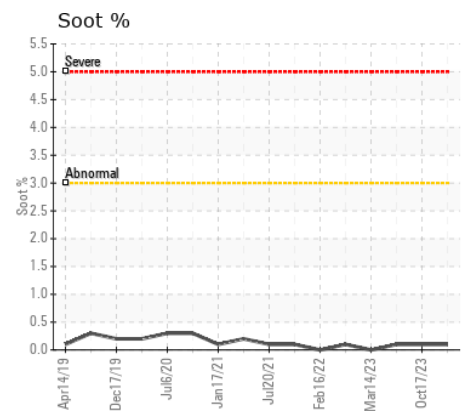
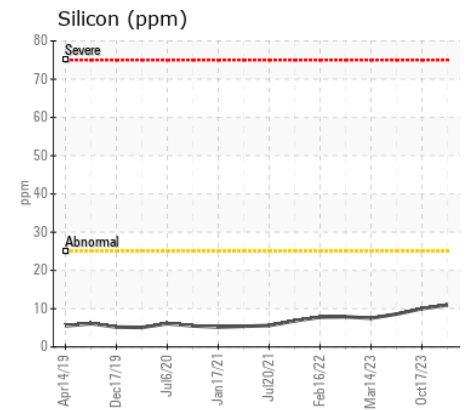
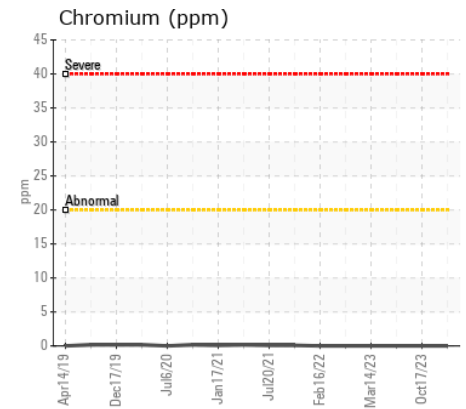
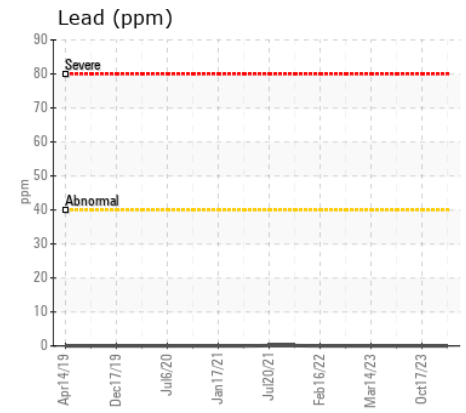
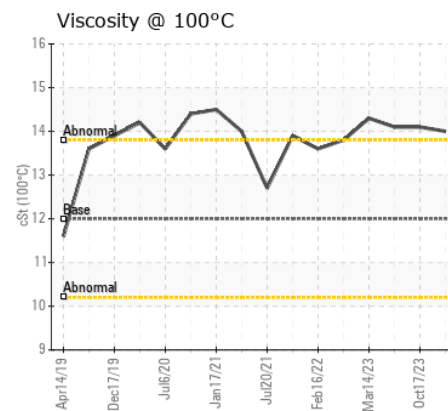
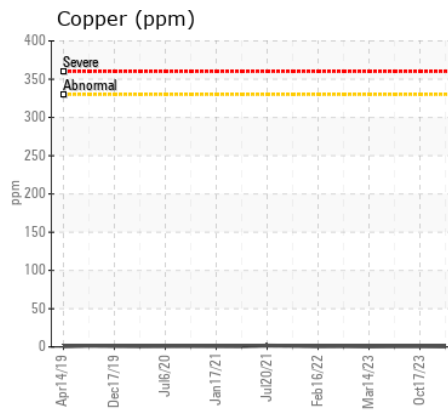
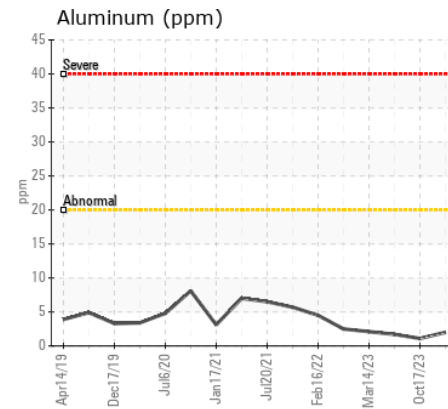
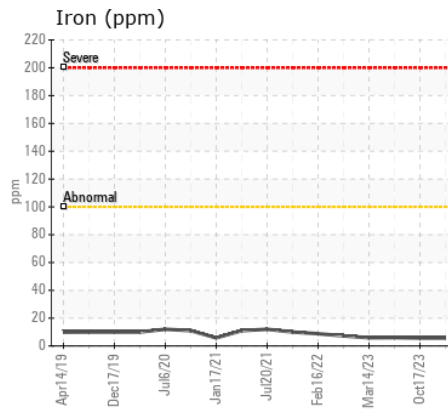
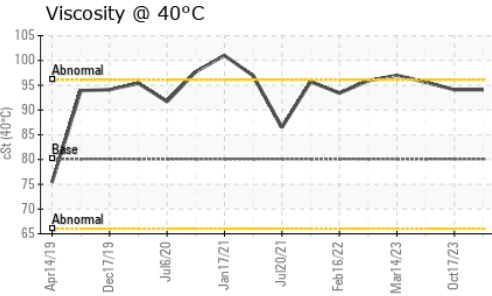
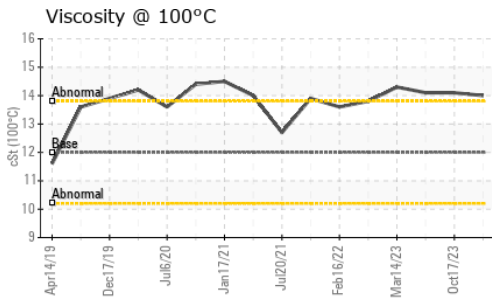
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|---------------|------|----------------|------|------|
| Silicon | ppm | ASTM D5185(m) | >25 | 11 | 10 | 9 |
| Potassium | ppm | ASTM D5185(m) | >20 | 2 | 1 | 2 |
| 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 | 0.1 | 0.1 | 0.1 |
| Nitration | Abs/cm | ASTM D7624* | >20 | 6.9 | 7.3 | 7.3 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 19.8 | 19.2 | 19.2 |
| 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) | | 1 | 1 | 1 |
| Boron | ppm | ASTM D5185(m) | 2 | <1 | 1 | 2 |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | <1 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 50 | 56 | 57 | 57 |
| Manganese | ppm | ASTM D5185(m) | 0 | 0 | 0 | <1 |
| Magnesium | ppm | ASTM D5185(m) | 950 | 915 | 940 | 960 |
| Calcium | ppm | ASTM D5185(m) | 1050 | 1165 | 1098 | 1065 |
| Phosphorus | ppm | ASTM D5185(m) | 995 | 1013 | 1002 | 1047 |
| Zinc | ppm | ASTM D5185(m) | 1180 | 1200 | 1188 | 1169 |
| Sulfur | ppm | ASTM D5185(m) | 2600 | 2816 | 2532 | 2574 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 15.5 | 15.1 | 14.8 |
| Visc @ 40°C | cSt | ASTM D7279(m) | 80.1 | 94.1 | 94.1 | 95.6 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 12.00 | 14.0 | 14.1 | 14.1 |
| Viscosity Index (VI) | Scale | ASTM D2270* | 144 | 152 | 153 | 151 |



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 LES ENTREPRISES MICHAUVILLE INC.
Sample No. : PC0075918 **Received** : 08 Jan 2024
Lab Number : 02606991 **Diagnosed** : 08 Jan 2024
Unique Number : 5708077 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: KV40, VI)

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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