



Machine Id
201072
Component
Diesel Engine
Fluid
PETRO CANADA DURON XL SYN BLEND 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | GFL0099558 | GFL0091648 | GFL0084268 |
| Sample Date | | Client Info | | 09 Jan 2024 | 03 Oct 2023 | 12 Jul 2023 |
| Machine Age | hrs | Client Info | | 11807 | 8176 | 136350 |
| Oil Age | hrs | Client Info | | 515 | 0 | 0 |
| Filter Age | hrs | Client Info | | 515 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|----------|-----|---------------|------|--------------|----|----|
| Iron | ppm | ASTM D5185(m) | >80 | 17 | 16 | 18 |
| Chromium | ppm | ASTM D5185(m) | >5 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185(m) | >2 | <1 | 0 | <1 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | >3 | 0 | <1 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >30 | 3 | 1 | 3 |
| Lead | ppm | ASTM D5185(m) | >30 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185(m) | >150 | <1 | <1 | <1 |
| Tin | ppm | ASTM D5185(m) | >5 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |

CONTAMINATION

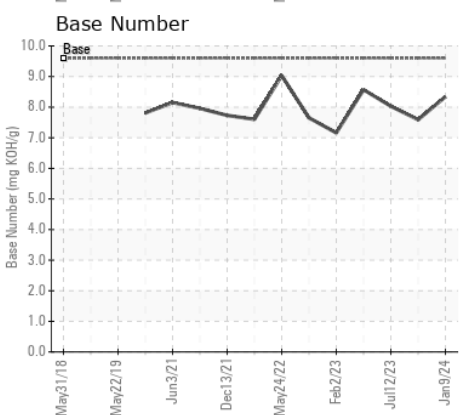
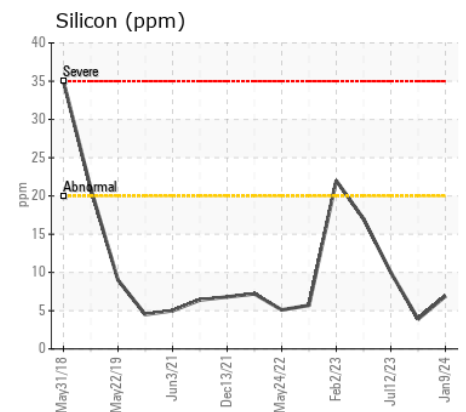
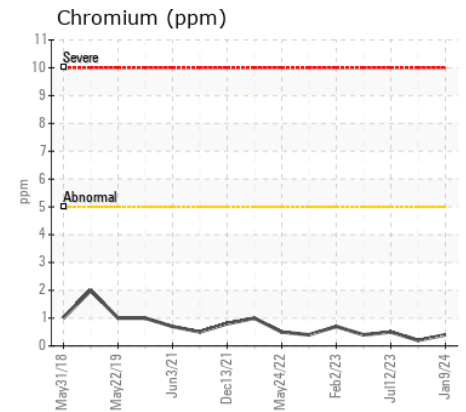
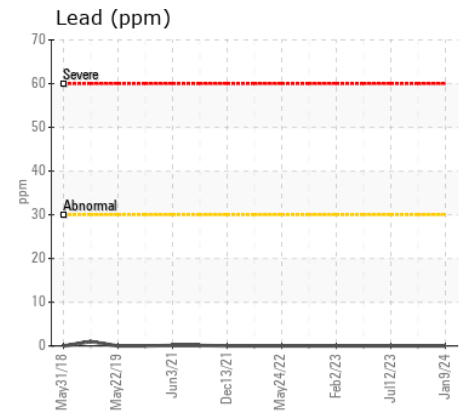
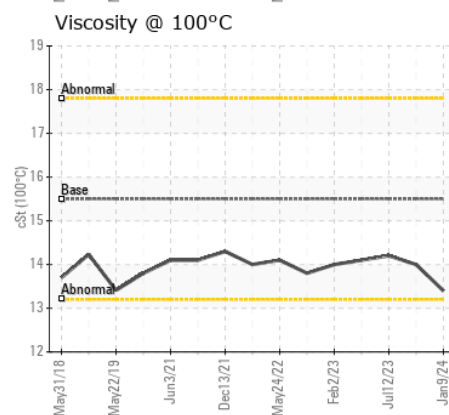
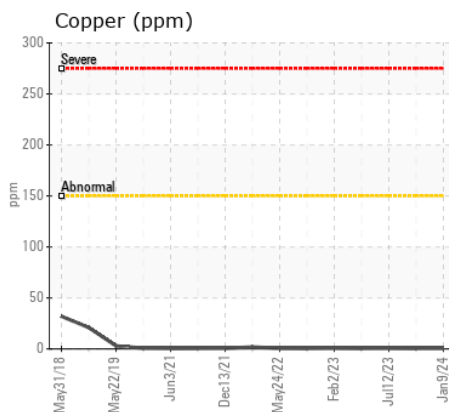
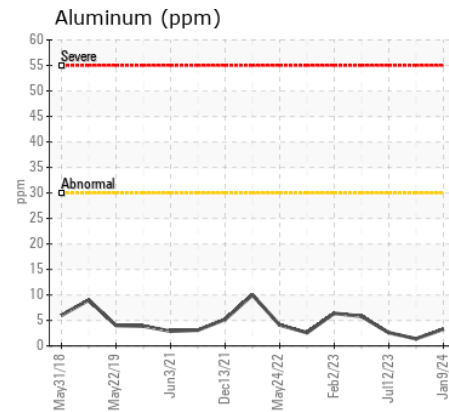
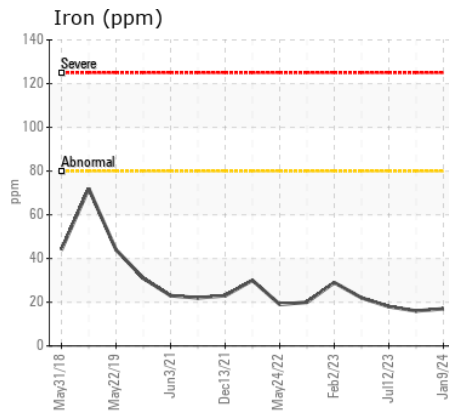
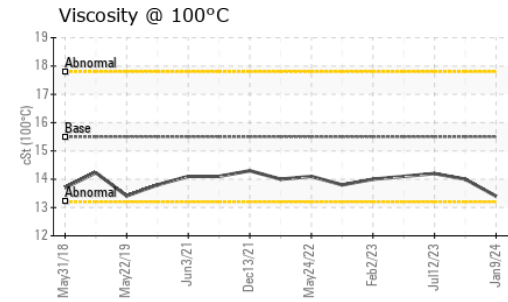
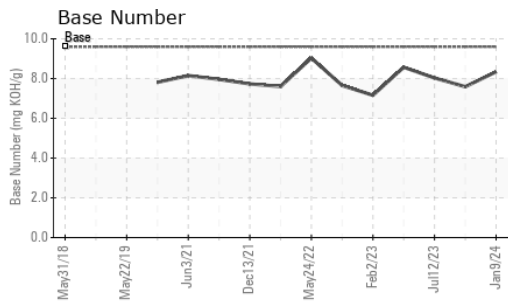
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|---------------|------|----------------|------|------|
| Silicon | ppm | ASTM D5185(m) | >20 | 7 | 4 | 10 |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | 0 | 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 | 0.8 | 0.9 | 0.9 |
| Nitration | Abs/cm | ASTM D7624* | >20 | 9.9 | 9.4 | 9.6 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 21.1 | 22.0 | 22.0 |
| Emulsified Water | scalar | Visual* | >0.2 | NEG | NEG | NEG |

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| | | | | | | |
|------------------|----------|---------------|------|-------------|------|------|
| Sodium | ppm | ASTM D5185(m) | | 1 | 1 | 4 |
| Boron | ppm | ASTM D5185(m) | 1 | 3 | 2 | 3 |
| Barium | ppm | ASTM D5185(m) | 1 | 0 | <1 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 60 | 55 | 60 | 57 |
| Manganese | ppm | ASTM D5185(m) | 1 | 0 | 0 | <1 |
| Magnesium | ppm | ASTM D5185(m) | 1010 | 896 | 945 | 941 |
| Calcium | ppm | ASTM D5185(m) | 1070 | 1030 | 1025 | 1047 |
| Phosphorus | ppm | ASTM D5185(m) | 1150 | 974 | 995 | 1041 |
| Zinc | ppm | ASTM D5185(m) | 1270 | 1129 | 1187 | 1168 |
| Sulfur | ppm | ASTM D5185(m) | 2060 | 2498 | 2467 | 2457 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 17.8 | 18.8 | 18.2 |
| Base Number (BN) | mg KOH/g | ASTM D2896* | 9.6 | 8.34 | 7.59 | 8.03 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 15.5 | 13.4 | 14.0 | 14.2 |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 550 - Rocky View County
Sample No. : GFL0099558 **Received** : 16 Jan 2024
Lab Number : 02608852 **Diagnosed** : 16 Jan 2024
Unique Number : 5709938 **Diagnostician** : Wes Davis
Test Package : MOB 2

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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