



| | |
|-----------------|-----------------|
| WEAR | ABNORMAL |
| CONTAMINATION | ABNORMAL |
| FLUID CONDITION | ABNORMAL |



Machine Id
8324
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Nous avons pris note que la vidange d'huile a été effectuée au moment de l'échantillonnage. Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | GFL0107522 | GFL0087611 | GFL0079508 |
| Sample Date | | Client Info | | 18 Mar 2024 | 04 Oct 2023 | 17 Apr 2023 |
| Machine Age | hrs | Client Info | | 18871 | 333317 | 328818 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | ABNORMAL | ABNORMAL | NORMAL |

WEAR

Usure de piston.

| | | | | | | |
|----------|-----|---------------|------|--------------|------|----|
| Iron | ppm | ASTM D5185(m) | >75 | 51 | 31 | 14 |
| Chromium | ppm | ASTM D5185(m) | >5 | 2 | 2 | <1 |
| Nickel | ppm | ASTM D5185(m) | >4 | <1 | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | >2 | <1 | 0 | <1 |
| Silver | ppm | ASTM D5185(m) | >2 | 0 | <1 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >15 | ▲ 15 | ▲ 25 | 4 |
| Lead | ppm | ASTM D5185(m) | >25 | 0 | <1 | <1 |
| Copper | ppm | ASTM D5185(m) | >100 | 2 | 1 | <1 |
| Tin | ppm | ASTM D5185(m) | >4 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |

CONTAMINATION

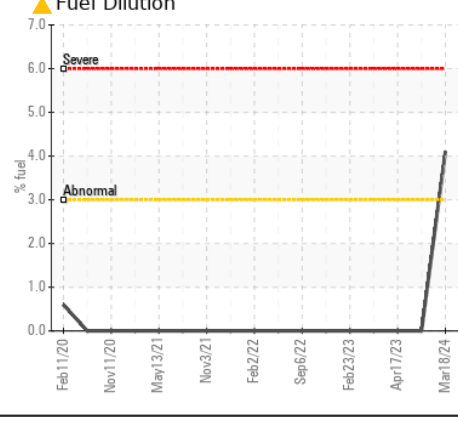
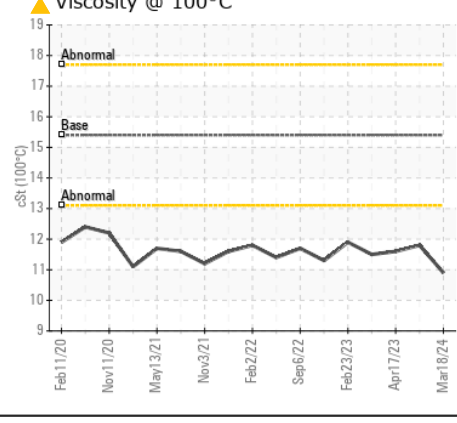
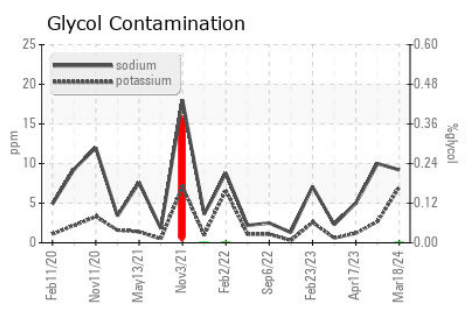
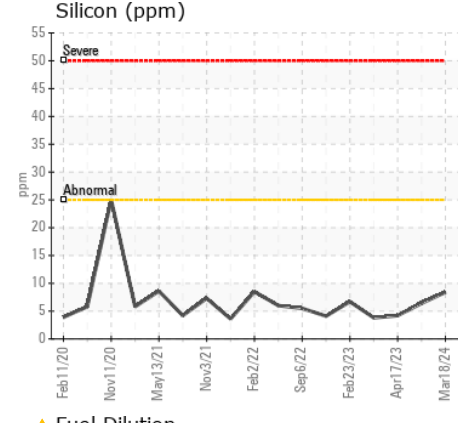
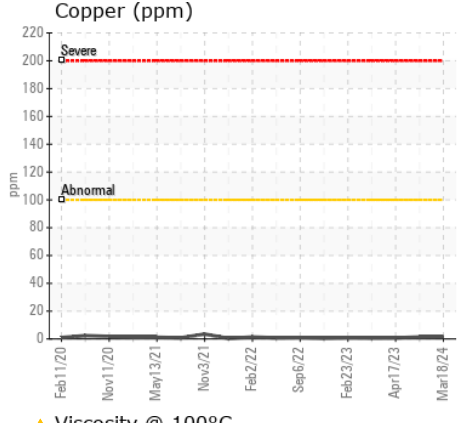
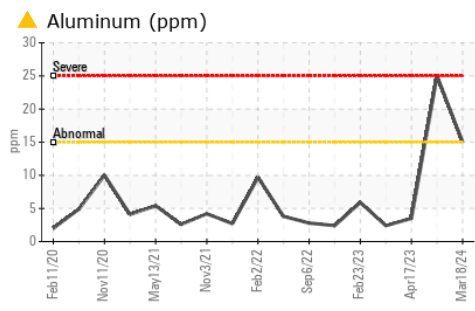
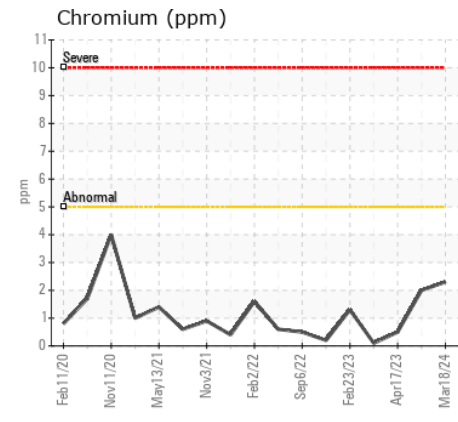
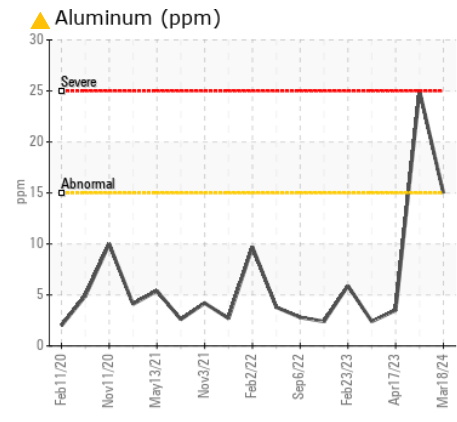
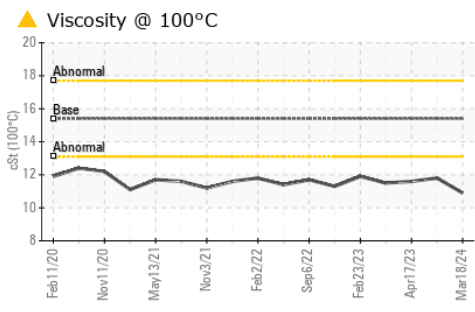
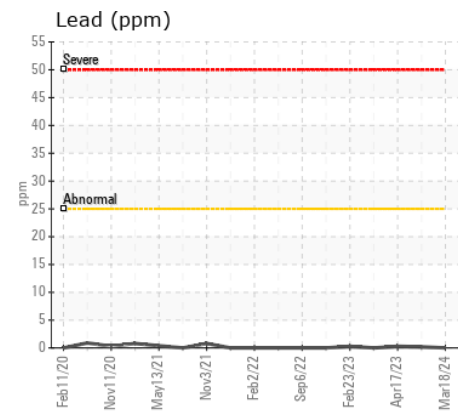
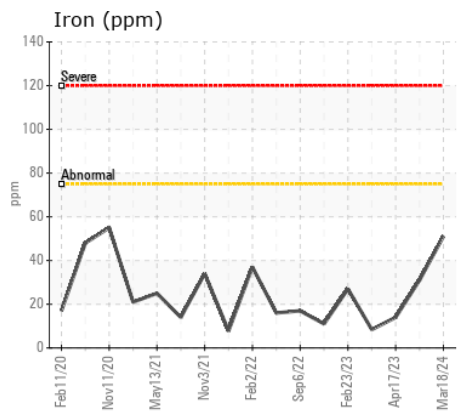
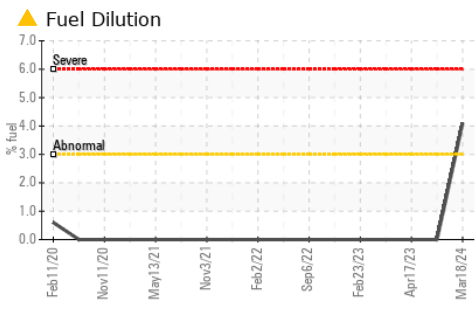
Quantité modérée de carburant dans l'huile. Les tests confirment la présence de carburant dans l'huile.

| | | | | | | |
|------------------|----------|---------------|------|--------------|------|------|
| Silicon | ppm | ASTM D5185(m) | >25 | 8 | 6 | 4 |
| Potassium | ppm | ASTM D5185(m) | >20 | 7 | 3 | 1 |
| Fuel | % | ASTM D7593* | >3.0 | ▲ 4.1 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | % | ASTM D7922* | | 0.0 | NEG | NEG |
| Soot % | % | ASTM D7844* | >6 | 1 | 1.3 | 0.2 |
| Nitration | Abs/cm | ASTM D7624* | >20 | 11.9 | 9.0 | 7.2 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 22.1 | 21.3 | 19.1 |
| Emulsified Water | scalar | Visual* | >0.2 | NEG | NEG | NEG |

FLUID CONDITION

Il y a du carburant dans l'huile, ce qui réduit la viscosité. L'huile n'est plus en état de service en raison d'une usure anormale et/ou sévère.

| | | | | | | |
|--------------|----------|---------------|------|---------------|------|------|
| Sodium | ppm | ASTM D5185(m) | | 9 | 10 | 5 |
| Boron | ppm | ASTM D5185(m) | 0 | 2 | 2 | 2 |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | <1 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 60 | 58 | 61 | 59 |
| Manganese | ppm | ASTM D5185(m) | 0 | 0 | 0 | <1 |
| Magnesium | ppm | ASTM D5185(m) | 1010 | 927 | 979 | 973 |
| Calcium | ppm | ASTM D5185(m) | 1070 | 1034 | 1081 | 1095 |
| Phosphorus | ppm | ASTM D5185(m) | 1150 | 994 | 1035 | 1084 |
| Zinc | ppm | ASTM D5185(m) | 1270 | 1154 | 1222 | 1191 |
| Sulfur | ppm | ASTM D5185(m) | 2060 | 2405 | 2519 | 2609 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 18.2 | 15.0 | 15.0 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 15.4 | ▲ 10.9 | 11.8 | 11.6 |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0107522 **Received** : 28 Mar 2024
Lab Number : 02625166 **Tested** : 01 Apr 2024
Unique Number : 5750285 **Diagnosed** : 01 Apr 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, Glycol, PercentFuel)

GFL Environmental - 747 - GMA - Solid Waste
 4 Chemin du Tremblay,
 Boucherville, QC
 CA J4B 6Z5
 Contact: Steve Voyer
 svoyer@matrec.ca

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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F: