



Machine Id  
**711037**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**

**RECOMMENDATION**

Nous vous recommandons de vérifier la source de la fuite de fluide de refroidissement. 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 |           | <b>GFL0107518</b>  | GFL0088873  | GFL0047515  |
| Sample Date    |     | Client Info |           | <b>13 Feb 2024</b> | 09 Aug 2023 | 08 Jun 2023 |
| Machine Age    | hrs | Client Info |           | <b>5594</b>        | 5002        | 4510        |
| Oil Age        | hrs | Client Info |           | <b>0</b>           | 600         | 600         |
| Filter Age     | hrs | Client Info |           | <b>0</b>           | 600         | 600         |
| Oil Changed    |     | Client Info |           | <b>Changed</b>     | Changed     | Changed     |
| Filter Changed |     | Client Info |           | <b>Changed</b>     | Changed     | Changed     |
| Sample Status  |     |             |           | <b>ABNORMAL</b>    | NORMAL      | NORMAL      |

**WEAR**

Les taux d'usure de tous les composants sont normaux.

|          |     |               |      |              |    |    |
|----------|-----|---------------|------|--------------|----|----|
| Iron     | ppm | ASTM D5185(m) | >120 | <b>11</b>    | 11 | 10 |
| Chromium | ppm | ASTM D5185(m) | >20  | <b>&lt;1</b> | <1 | <1 |
| Nickel   | ppm | ASTM D5185(m) | >5   | <b>&lt;1</b> | 0  | 0  |
| Titanium | ppm | ASTM D5185(m) | >2   | <b>0</b>     | 0  | <1 |
| Silver   | ppm | ASTM D5185(m) | >2   | <b>&lt;1</b> | <1 | 0  |
| Aluminum | ppm | ASTM D5185(m) | >20  | <b>3</b>     | 2  | 2  |
| Lead     | ppm | ASTM D5185(m) | >40  | <b>&lt;1</b> | <1 | 0  |
| Copper   | ppm | ASTM D5185(m) | >330 | <b>10</b>    | 3  | 2  |
| Tin      | ppm | ASTM D5185(m) | >15  | <b>&lt;1</b> | <1 | <1 |
| Vanadium | ppm | ASTM D5185(m) |      | <b>0</b>     | 0  | 0  |

**CONTAMINATION**

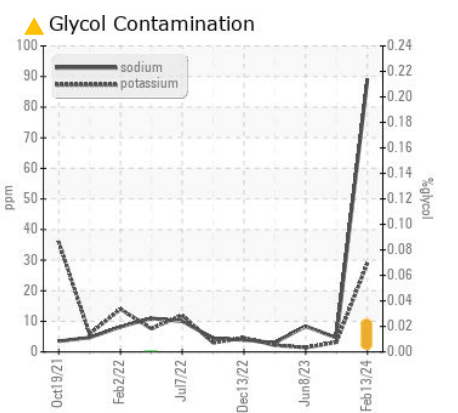
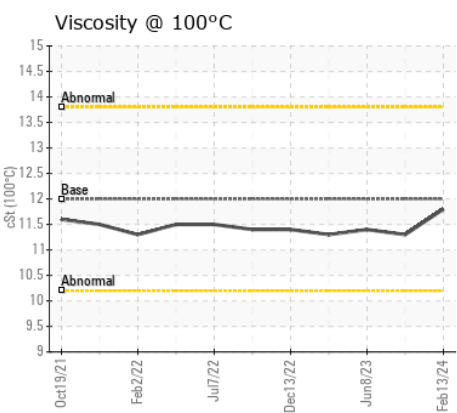
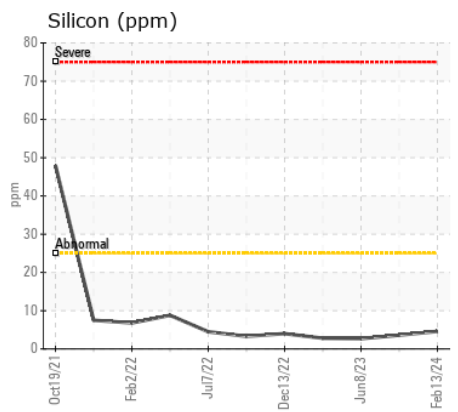
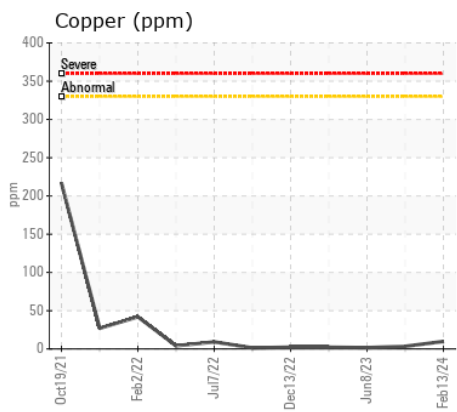
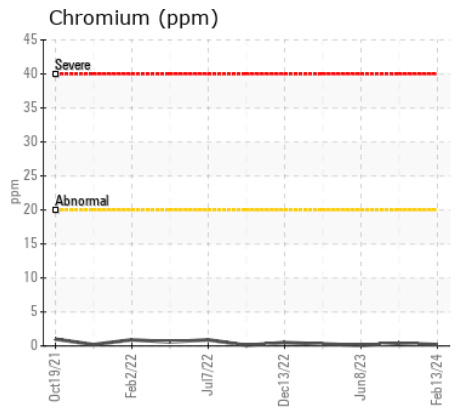
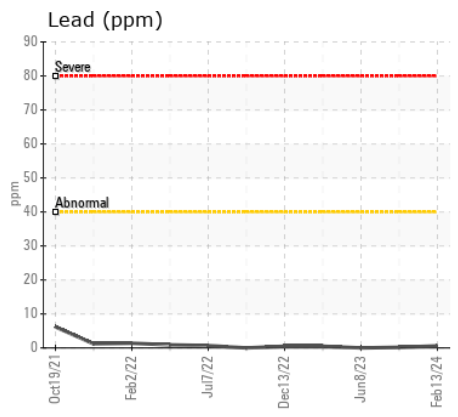
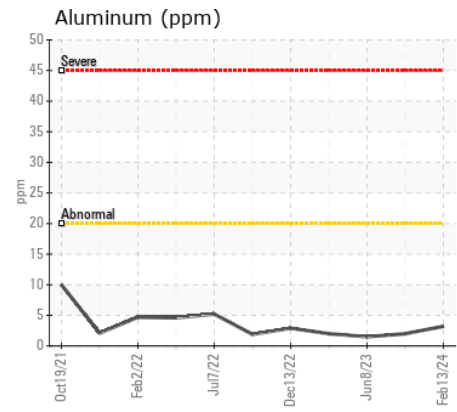
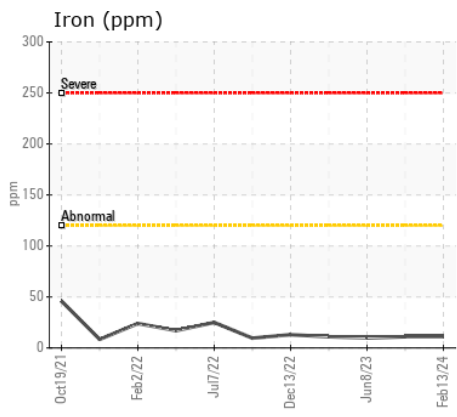
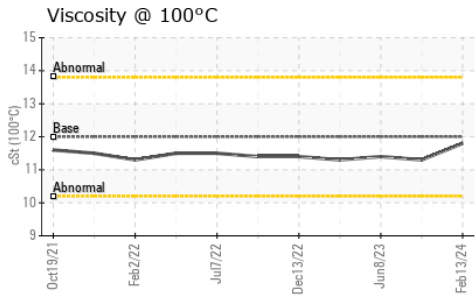
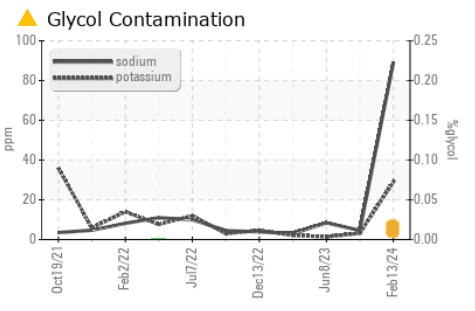
Le test de glycol est positif. Il y a une légère concentration de glycol dans le l'huile.

|                  |          |               |      |                |      |      |
|------------------|----------|---------------|------|----------------|------|------|
| Silicon          | ppm      | ASTM D5185(m) | >25  | <b>5</b>       | 4    | 3    |
| Potassium        | ppm      | ASTM D5185(m) | >20  | <b>▲ 29</b>    | 3    | 1    |
| Fuel             |          | WC Method     | >3.0 | <b>&lt;1.0</b> | <1.0 | <1.0 |
| Water            |          | WC Method     | >0.2 | <b>NEG</b>     | NEG  | NEG  |
| Glycol           | %        | ASTM D7922*   |      | <b>▲ 0.025</b> | NEG  | NEG  |
| Soot %           | %        | ASTM D7844*   | >4   | <b>0.3</b>     | 0.3  | 0.2  |
| Nitration        | Abs/cm   | ASTM D7624*   | >20  | <b>9.0</b>     | 8.0  | 8.1  |
| Sulfation        | Abs/.1mm | ASTM D7415*   | >30  | <b>21.2</b>    | 20.5 | 19.8 |
| Emulsified Water | scalar   | Visual*       | >0.2 | <b>NEG</b>     | NEG  | NEG  |

**FLUID CONDITION**

l'huile ne peut plus être utilisée en raison de la présence de contaminants.

|              |          |               |       |             |      |      |
|--------------|----------|---------------|-------|-------------|------|------|
| Sodium       | ppm      | ASTM D5185(m) |       | <b>▲ 89</b> | 5    | 8    |
| Boron        | ppm      | ASTM D5185(m) | 2     | <b>6</b>    | 2    | 4    |
| Barium       | ppm      | ASTM D5185(m) | 0     | <b>0</b>    | 0    | 0    |
| Molybdenum   | ppm      | ASTM D5185(m) | 50    | <b>60</b>   | 59   | 59   |
| Manganese    | ppm      | ASTM D5185(m) | 0     | <b>0</b>    | <1   | <1   |
| Magnesium    | ppm      | ASTM D5185(m) | 950   | <b>885</b>  | 986  | 950  |
| Calcium      | ppm      | ASTM D5185(m) | 1050  | <b>1069</b> | 1121 | 1141 |
| Phosphorus   | ppm      | ASTM D5185(m) | 995   | <b>940</b>  | 1055 | 1027 |
| Zinc         | ppm      | ASTM D5185(m) | 1180  | <b>1093</b> | 1212 | 1215 |
| Sulfur       | ppm      | ASTM D5185(m) | 2600  | <b>2445</b> | 2379 | 2354 |
| Oxidation    | Abs/.1mm | ASTM D7414*   | >25   | <b>16.1</b> | 16.6 | 16.2 |
| Visc @ 100°C | cSt      | ASTM D7279(m) | 12.00 | <b>11.8</b> | 11.3 | 11.4 |



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0107518 **Received** : 15 Feb 2024  
**Lab Number** : 02615939 **Tested** : 15 Feb 2024  
**Unique Number** : 5733049 **Diagnosed** : 15 Feb 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: Glycol )

**GFL Environmental - 747 - GMA - Solid Waste**  
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 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.