



Machine Id  
**7233**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**

### RECOMMENDATION

Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>GFL0114831</b>  | GFL0088688  | GFL0067355  |
| Sample Date    |     | Client Info |           | <b>15 Mar 2024</b> | 10 Dec 2023 | 27 Jan 2023 |
| Machine Age    | hrs | Client Info |           | <b>16121</b>       | 0           | 201156      |
| Oil Age        | hrs | Client Info |           | <b>0</b>           | 0           | 0           |
| Filter Age     | hrs | Client Info |           | <b>0</b>           | 0           | 0           |
| Oil Changed    |     | Client Info |           | <b>Changed</b>     | N/A         | Changed     |
| Filter Changed |     | Client Info |           | <b>Changed</b>     | N/A         | Changed     |
| Sample Status  |     |             |           | <b>NORMAL</b>      | ABNORMAL    | NORMAL      |

### WEAR

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

|          |     |               |      |          |    |    |
|----------|-----|---------------|------|----------|----|----|
| Iron     | ppm | ASTM D5185(m) | >120 | <b>6</b> | 12 | 3  |
| Chromium | ppm | ASTM D5185(m) | >20  | <b>0</b> | <1 | 0  |
| Nickel   | ppm | ASTM D5185(m) | >5   | <b>0</b> | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | >2   | <b>0</b> | 0  | <1 |
| Silver   | ppm | ASTM D5185(m) | >2   | <b>0</b> | <1 | 0  |
| Aluminum | ppm | ASTM D5185(m) | >20  | <b>2</b> | 3  | 2  |
| Lead     | ppm | ASTM D5185(m) | >40  | <b>0</b> | 1  | <1 |
| Copper   | ppm | ASTM D5185(m) | >330 | <b>2</b> | 6  | <1 |
| Tin      | ppm | ASTM D5185(m) | >15  | <b>0</b> | <1 | 0  |
| Vanadium | ppm | ASTM D5185(m) |      | <b>0</b> | 0  | 0  |

### CONTAMINATION

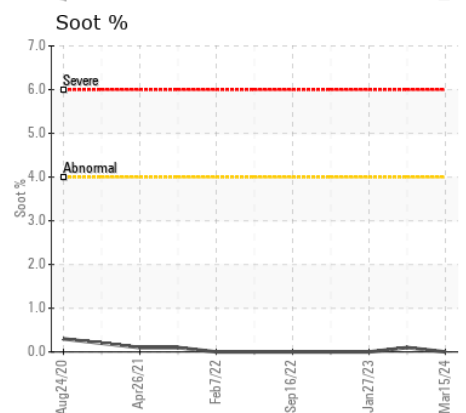
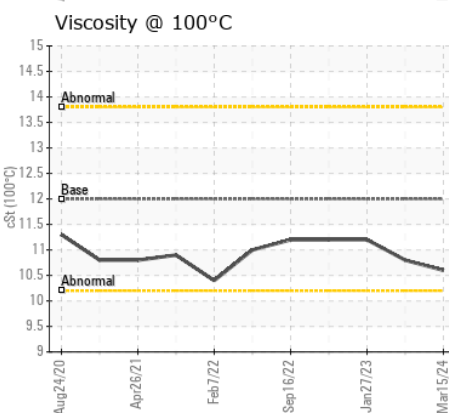
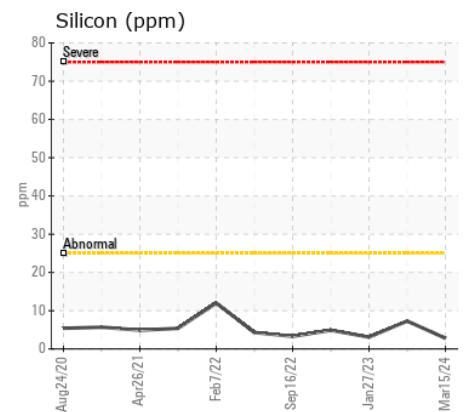
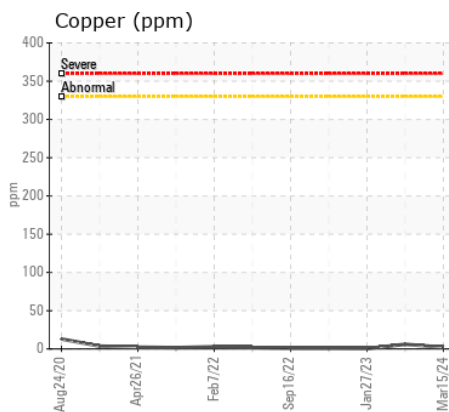
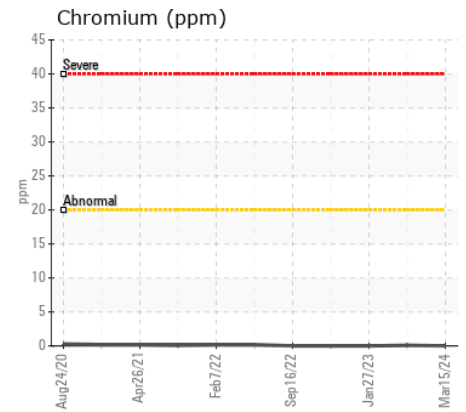
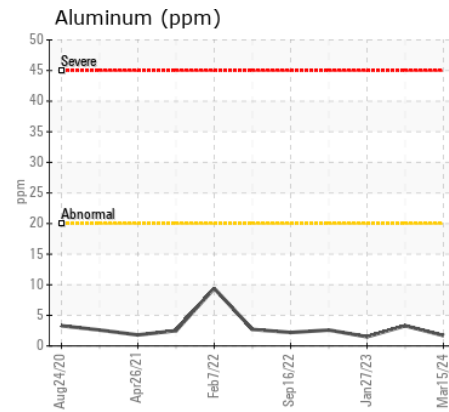
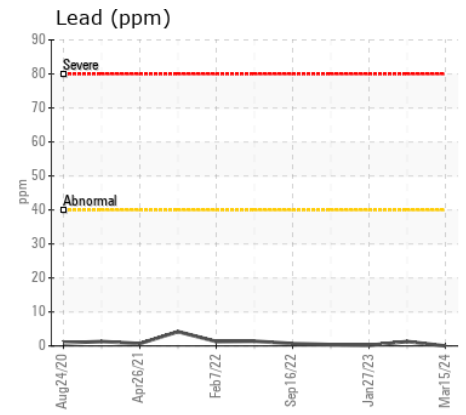
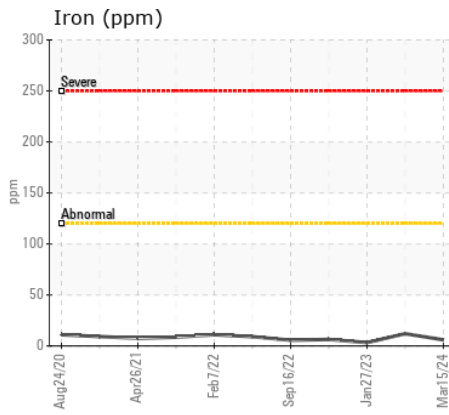
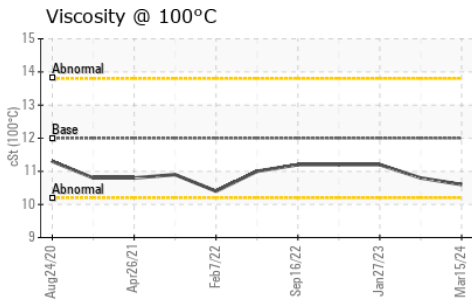
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. Il n'y a aucun indice de contamination dans l'huile.

|                  |          |               |      |                |      |      |
|------------------|----------|---------------|------|----------------|------|------|
| Silicon          | ppm      | ASTM D5185(m) | >25  | <b>3</b>       | 7    | 3    |
| Potassium        | ppm      | ASTM D5185(m) | >20  | <b>7</b>       | 6    | <1   |
| Fuel             |          | WC Method     | >3.0 | <b>&lt;1.0</b> | 2.7  | <1.0 |
| Water            |          | WC Method     | >0.2 | <b>NEG</b>     | NEG  | NEG  |
| Glycol           |          | WC Method     |      | <b>NEG</b>     | 0.0  | NEG  |
| Soot %           | %        | ASTM D7844*   | >4   | <b>0</b>       | 0.1  | 0    |
| Nitration        | Abs/cm   | ASTM D7624*   | >20  | <b>9.5</b>     | 10.5 | 6.2  |
| Sulfation        | Abs/.1mm | ASTM D7415*   | >30  | <b>19.7</b>    | 22.5 | 19.6 |
| Emulsified Water | scalar   | Visual*       | >0.2 | <b>NEG</b>     | NEG  | NEG  |

### FLUID CONDITION

L'état de l'huile est acceptable pour la durée de service.

|              |          |               |       |             |        |      |
|--------------|----------|---------------|-------|-------------|--------|------|
| Sodium       | ppm      | ASTM D5185(m) |       | <b>7</b>    | 30     | 10   |
| Boron        | ppm      | ASTM D5185(m) | 2     | <b>5</b>    | 10     | 4    |
| Barium       | ppm      | ASTM D5185(m) | 0     | <b>0</b>    | <1     | 0    |
| Molybdenum   | ppm      | ASTM D5185(m) | 50    | <b>58</b>   | 47     | 57   |
| Manganese    | ppm      | ASTM D5185(m) | 0     | <b>0</b>    | 0      | <1   |
| Magnesium    | ppm      | ASTM D5185(m) | 950   | <b>919</b>  | 864    | 938  |
| Calcium      | ppm      | ASTM D5185(m) | 1050  | <b>1071</b> | 1072   | 1139 |
| Phosphorus   | ppm      | ASTM D5185(m) | 995   | <b>935</b>  | 818    | 1072 |
| Zinc         | ppm      | ASTM D5185(m) | 1180  | <b>1135</b> | 1058   | 1200 |
| Sulfur       | ppm      | ASTM D5185(m) | 2600  | <b>2452</b> | 2336   | 2780 |
| Oxidation    | Abs/.1mm | ASTM D7414*   | >25   | <b>15.9</b> | 17.0   | 14.5 |
| Visc @ 100°C | cSt      | ASTM D7279(m) | 12.00 | <b>10.6</b> | ▲ 10.8 | 11.2 |



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 780 - GMA - ICI - Solid Waste**  
**Sample No.** : GFL0114831 **Received** : 28 Mar 2024 4365 boul. St-Elzear Ouest,  
**Lab Number** : 02625152 **Tested** : 28 Mar 2024 Laval, QC  
**Unique Number** : 5750271 **Diagnosed** : 28 Mar 2024 - Wes Davis CA H7P 4J3  
**Test Package** : MOB 1 Contact: Pieces Laval  
 pieces.laval@gflenv.com  
 T: (450)687-3838  
 F:

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.