



|                 |               |
|-----------------|---------------|
| WEAR            | <b>NORMAL</b> |
| CONTAMINATION   | <b>NORMAL</b> |
| FLUID CONDITION | <b>NORMAL</b> |

Machine Id  
**2215**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SAE 10W30 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>GFL0108242</b>  | GFL0024248  | GFL0024256  |
| Sample Date    |     | Client Info |           | <b>21 Feb 2024</b> | 10 Feb 2022 | 08 Jul 2021 |
| Machine Age    | hrs | Client Info |           | <b>14092</b>       | 13114       | 12899       |
| Oil Age        | hrs | Client Info |           | <b>250</b>         | 0           | 400         |
| Filter Age     | hrs | Client Info |           | <b>250</b>         | 0           | 400         |
| Oil Changed    |     | Client Info |           | <b>N/A</b>         | N/A         | Changed     |
| Filter Changed |     | Client Info |           | <b>N/A</b>         | N/A         | Changed     |
| Sample Status  |     |             |           | <b>NORMAL</b>      | NORMAL      | NORMAL      |

**WEAR**

All component wear rates are normal.

|          |     |               |      |              |    |    |
|----------|-----|---------------|------|--------------|----|----|
| Iron     | ppm | ASTM D5185(m) | >200 | <b>21</b>    | 9  | 20 |
| Chromium | ppm | ASTM D5185(m) | >20  | <b>&lt;1</b> | <1 | <1 |
| Nickel   | ppm | ASTM D5185(m) | >2   | <b>&lt;1</b> | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | >2   | <b>0</b>     | 0  | <1 |
| Silver   | ppm | ASTM D5185(m) | >2   | <b>0</b>     | 0  | 0  |
| Aluminum | ppm | ASTM D5185(m) | >30  | <b>2</b>     | 1  | 2  |
| Lead     | ppm | ASTM D5185(m) | >30  | <b>3</b>     | 1  | <1 |
| Copper   | ppm | ASTM D5185(m) | >30  | <b>&lt;1</b> | <1 | <1 |
| Tin      | ppm | ASTM D5185(m) | >15  | <b>0</b>     | 0  | <1 |
| Vanadium | ppm | ASTM D5185(m) |      | <b>0</b>     | 0  | 0  |

**CONTAMINATION**

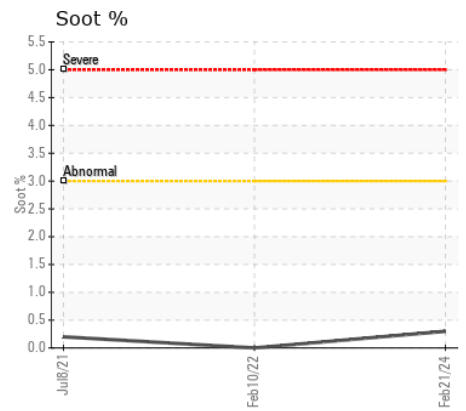
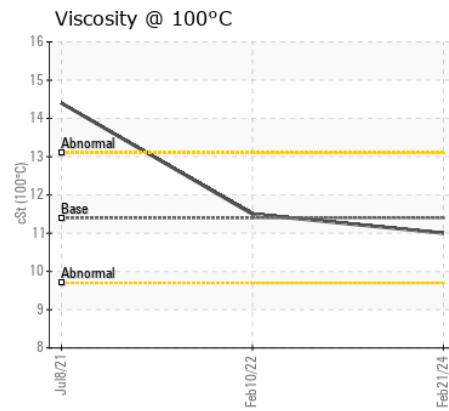
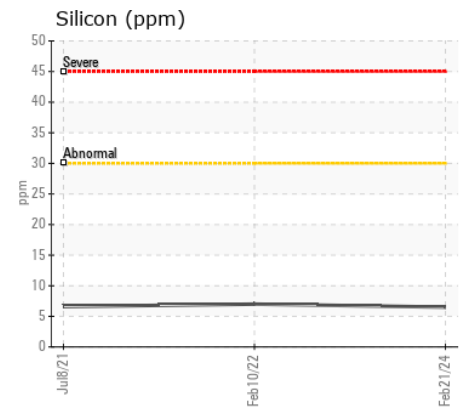
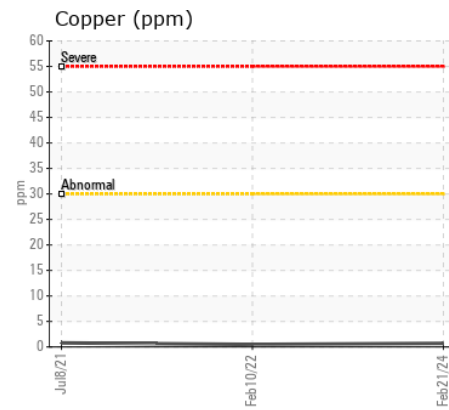
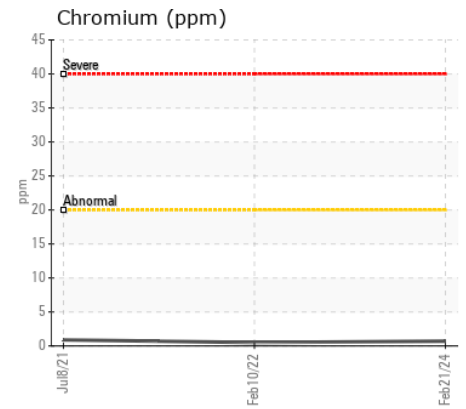
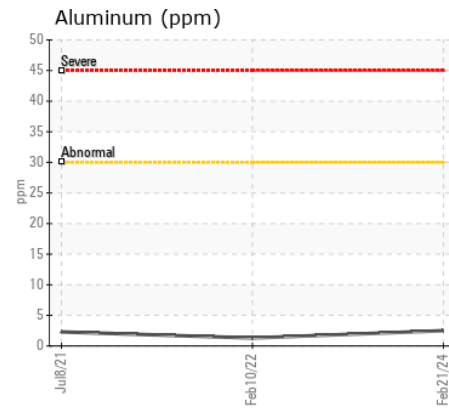
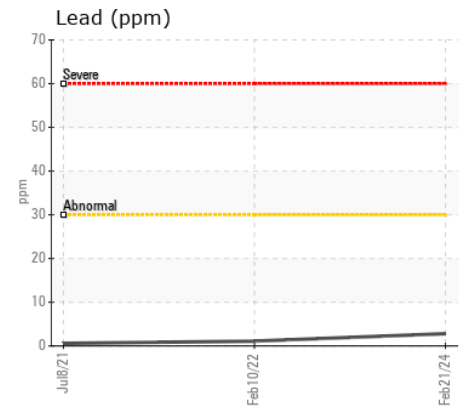
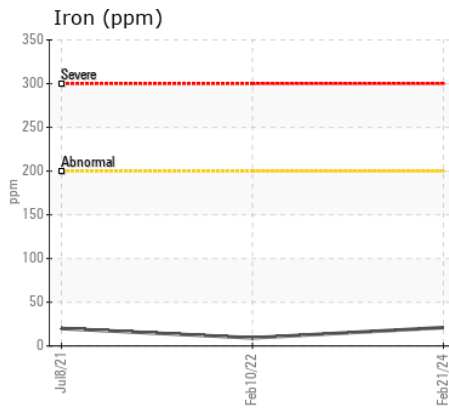
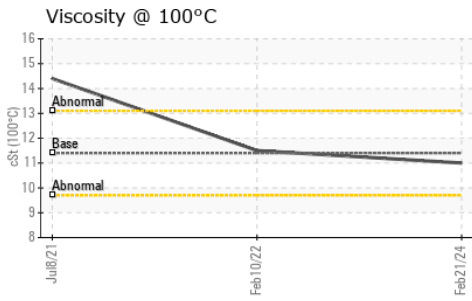
There is no indication of any contamination in the oil.

|                  |          |               |      |                |      |      |
|------------------|----------|---------------|------|----------------|------|------|
| Silicon          | ppm      | ASTM D5185(m) | >30  | <b>6</b>       | 7    | 7    |
| Potassium        | ppm      | ASTM D5185(m) | >20  | <b>1</b>       | 1    | 4    |
| 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           |          | WC Method     |      | <b>NEG</b>     | NEG  | NEG  |
| Soot %           | %        | ASTM D7844*   | >3   | <b>0.3</b>     | 0    | 0.2  |
| Nitration        | Abs/cm   | ASTM D7624*   | >20  | <b>7.3</b>     | 6.0  | 7.7  |
| Sulfation        | Abs/.1mm | ASTM D7415*   | >30  | <b>18.8</b>    | 19.3 | 21.2 |
| Emulsified Water | scalar   | Visual*       | >0.2 | <b>NEG</b>     | NEG  | NEG  |

**FLUID CONDITION**

The condition of the oil is acceptable for the time in service.

|              |          |               |      |             |      |      |
|--------------|----------|---------------|------|-------------|------|------|
| Sodium       | ppm      | ASTM D5185(m) |      | <b>2</b>    | 1    | 4    |
| Boron        | ppm      | ASTM D5185(m) | 1    | <b>1</b>    | 12   | 142  |
| Barium       | ppm      | ASTM D5185(m) | 1    | <b>0</b>    | 0    | 0    |
| Molybdenum   | ppm      | ASTM D5185(m) | 1    | <b>59</b>   | 52   | 1    |
| Manganese    | ppm      | ASTM D5185(m) | 1    | <b>0</b>    | <1   | <1   |
| Magnesium    | ppm      | ASTM D5185(m) | 10   | <b>965</b>  | 934  | 91   |
| Calcium      | ppm      | ASTM D5185(m) | 2942 | <b>1042</b> | 1091 | 2018 |
| Phosphorus   | ppm      | ASTM D5185(m) | 1102 | <b>1034</b> | 1027 | 988  |
| Zinc         | ppm      | ASTM D5185(m) | 1351 | <b>1179</b> | 1178 | 1117 |
| Sulfur       | ppm      | ASTM D5185(m) | 3903 | <b>2790</b> | 2648 | 2855 |
| Oxidation    | Abs/.1mm | ASTM D7414*   | >25  | <b>15.0</b> | 14.1 | 16.6 |
| Visc @ 100°C | cSt      | ASTM D7279(m) | 11.4 | <b>11.0</b> | 11.5 | 14.4 |



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0108242  
**Lab Number** : 02617998  
**Unique Number** : 5735108  
**Test Package** : MOB 1  
**Received** : 26 Feb 2024  
**Tested** : 26 Feb 2024  
**Diagnosed** : 26 Feb 2024 - Wes Davis

**GFL Environmental - 355 - Saskatoon**  
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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.