



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



Machine Id  
**940008-192501**  
Component  
**Natural Gas Engine**  
Fluid  
**PETRO CANADA DURON GEO LD 15W40 (--- LTR)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>GFL0088463</b>  | GFL0073225  | GFL0088467  |
| Sample Date    |     | Client Info |           | <b>12 Jan 2024</b> | 16 Nov 2023 | 23 Aug 2023 |
| Machine Age    | hrs | Client Info |           | <b>11880</b>       | 11267       | 10679       |
| Oil Age        | hrs | Client Info |           | <b>600</b>         | 650         | 650         |
| Filter Age     | hrs | Client Info |           | <b>600</b>         | 650         | 650         |
| Oil Changed    |     | Client Info |           | <b>Changed</b>     | Changed     | Changed     |
| Filter Changed |     | Client Info |           | <b>Changed</b>     | Changed     | Changed     |
| Sample Status  |     |             |           | <b>NORMAL</b>      | NORMAL      | NORMAL      |

**WEAR**

All component wear rates are normal.

|              |        |             |      |              |      |      |
|--------------|--------|-------------|------|--------------|------|------|
| Iron         | ppm    | ASTM D5185m | >50  | <b>11</b>    | 29   | 22   |
| Chromium     | ppm    | ASTM D5185m | >5   | <b>&lt;1</b> | 3    | 1    |
| Nickel       | ppm    | ASTM D5185m | >4   | <b>&lt;1</b> | 1    | <1   |
| Titanium     | ppm    | ASTM D5185m | >5   | <b>0</b>     | <1   | <1   |
| Silver       | ppm    | ASTM D5185m | >3   | <b>0</b>     | 0    | 0    |
| Aluminum     | ppm    | ASTM D5185m | >25  | <b>2</b>     | 6    | 6    |
| Lead         | ppm    | ASTM D5185m | >40  | <b>&lt;1</b> | 3    | <1   |
| Copper       | ppm    | ASTM D5185m | >150 | <b>&lt;1</b> | <1   | <1   |
| Tin          | ppm    | ASTM D5185m | >4   | <b>&lt;1</b> | 1    | 0    |
| Vanadium     | ppm    | ASTM D5185m |      | <b>&lt;1</b> | <1   | 0    |
| White Metal  | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | NONE |
| Yellow Metal | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | NONE |

**CONTAMINATION**

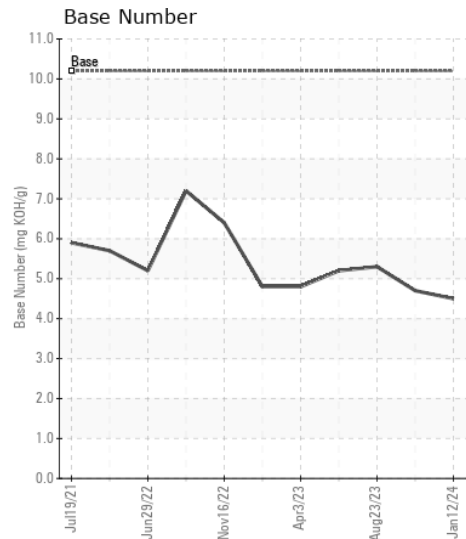
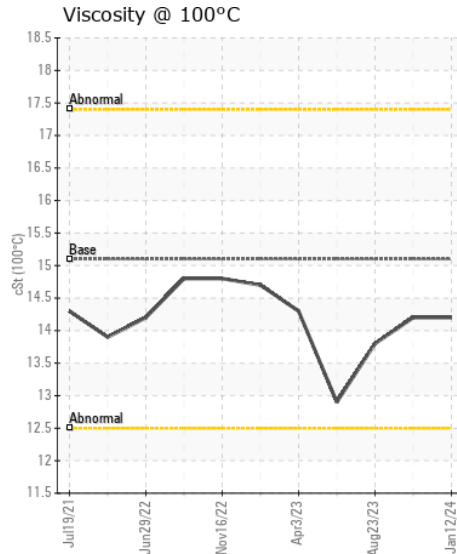
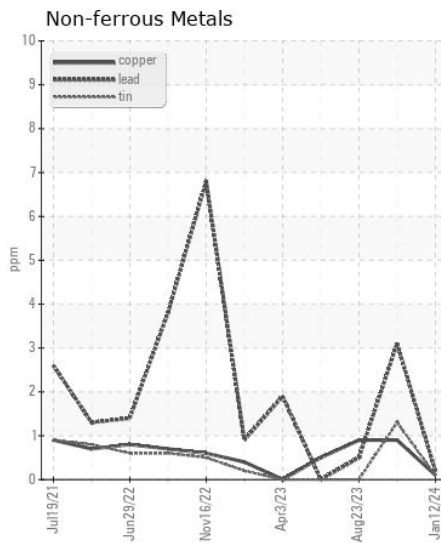
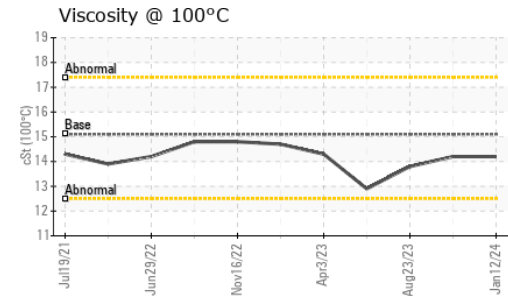
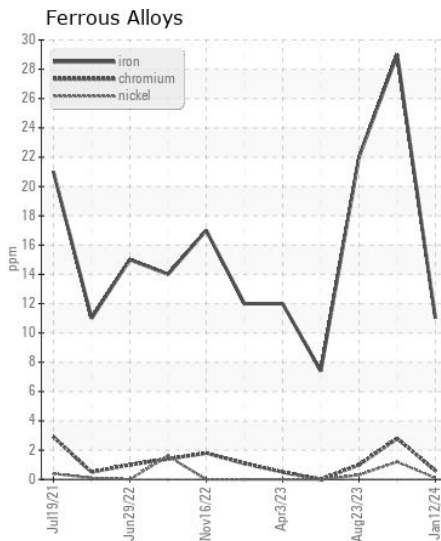
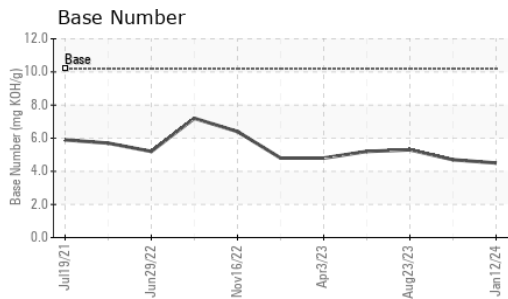
There is no indication of any contamination in the oil.

|                  |          |             |       |              |       |       |
|------------------|----------|-------------|-------|--------------|-------|-------|
| Silicon          | ppm      | ASTM D5185m | >25   | <b>5</b>     | 10    | 9     |
| Potassium        | ppm      | ASTM D5185m | >20   | <b>0</b>     | <1    | 0     |
| Water            |          | WC Method   | >0.1  | <b>NEG</b>   | NEG   | NEG   |
| Soot %           | %        | *ASTM D7844 |       | <b>0</b>     | 0.1   | 0.1   |
| Nitration        | Abs/cm   | *ASTM D7624 | >20   | <b>11.5</b>  | 12.7  | 10.5  |
| Sulfation        | Abs/.1mm | *ASTM D7415 | >30   | <b>23.4</b>  | 27.8  | 23.2  |
| Silt             | scalar   | *Visual     | NONE  | <b>NONE</b>  | NONE  | NONE  |
| Debris           | scalar   | *Visual     | NONE  | <b>NONE</b>  | NONE  | NONE  |
| Sand/Dirt        | scalar   | *Visual     | NONE  | <b>NONE</b>  | NONE  | NONE  |
| Appearance       | scalar   | *Visual     | NORML | <b>NORML</b> | NORML | NORML |
| Odor             | scalar   | *Visual     | NORML | <b>NORML</b> | NORML | NORML |
| Emulsified Water | scalar   | *Visual     | >0.1  | <b>NEG</b>   | 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 D5185m |      | <b>7</b>     | 14   | 5    |
| Boron            | ppm      | ASTM D5185m | 50   | <b>13</b>    | 9    | 23   |
| Barium           | ppm      | ASTM D5185m | 5    | <b>0</b>     | 0    | 0    |
| Molybdenum       | ppm      | ASTM D5185m | 50   | <b>75</b>    | 89   | 72   |
| Manganese        | ppm      | ASTM D5185m | 0    | <b>&lt;1</b> | <1   | <1   |
| Magnesium        | ppm      | ASTM D5185m | 560  | <b>619</b>   | 797  | 619  |
| Calcium          | ppm      | ASTM D5185m | 1510 | <b>1678</b>  | 2314 | 1899 |
| Phosphorus       | ppm      | ASTM D5185m | 780  | <b>806</b>   | 1113 | 862  |
| Zinc             | ppm      | ASTM D5185m | 870  | <b>1034</b>  | 1452 | 1100 |
| Sulfur           | ppm      | ASTM D5185m | 2040 | <b>2560</b>  | 2875 | 3226 |
| Oxidation        | Abs/.1mm | *ASTM D7414 | >25  | <b>18.9</b>  | 20.7 | 19.0 |
| Base Number (BN) | mg KOH/g | ASTM D2896  | 10.2 | <b>4.5</b>   | 4.7  | 5.3  |
| Visc @ 100°C     | cSt      | ASTM D445   | 15.1 | <b>14.2</b>  | 14.2 | 13.8 |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0088463 **Recieved** : 16 Jan 2024  
**Lab Number** : 06060723 **Diagnosed** : 16 Jan 2024  
**Unique Number** : 10832105 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 146 - Augusta**  
 1064 Franke Industrial  
 Augusta, GA  
 US 30909  
 Contact: JEFFERY WASHINGTON  
 jeff.washington@gflenv.com  
 T:  
 F:

To discuss this sample report, contact Customer Service at 1-800-237-1369.  
 \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.  
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)