



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

Area  
**(GD53870)**  
Machine Id  
**228036**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (6 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>GFL0120458</b>  | GFL0060359  | GFL0066174  |
| Sample Date    |     | Client Info |           | <b>24 Jun 2024</b> | 08 May 2024 | 15 Dec 2023 |
| Machine Age    | hrs | Client Info |           | <b>19650</b>       | 19650       | 19650       |
| Oil Age        | hrs | Client Info |           | <b>500</b>         | 19650       | 500         |
| Filter Age     | hrs | Client Info |           | <b>500</b>         | 0           | 500         |
| Oil Changed    |     | Client Info |           | <b>Changed</b>     | Not Changd  | Changed     |
| Filter Changed |     | Client Info |           | <b>Changed</b>     | Not Changed | Changed     |
| Sample Status  |     |             |           | <b>NORMAL</b>      | NORMAL      | NORMAL      |

**WEAR**

All component wear rates are normal.

|              |        |             |      |              |      |      |
|--------------|--------|-------------|------|--------------|------|------|
| Iron         | ppm    | ASTM D5185m | >100 | <b>10</b>    | 8    | 10   |
| Chromium     | ppm    | ASTM D5185m | >20  | <b>&lt;1</b> | <1   | <1   |
| Nickel       | ppm    | ASTM D5185m | >4   | <b>0</b>     | 0    | 0    |
| Titanium     | ppm    | ASTM D5185m |      | <b>&lt;1</b> | <1   | 0    |
| Silver       | ppm    | ASTM D5185m | >3   | <b>0</b>     | <1   | 0    |
| Aluminum     | ppm    | ASTM D5185m | >20  | <b>&lt;1</b> | 1    | 1    |
| Lead         | ppm    | ASTM D5185m | >40  | <b>0</b>     | 1    | 3    |
| Copper       | ppm    | ASTM D5185m | >330 | <b>19</b>    | 14   | 4    |
| Tin          | ppm    | ASTM D5185m | >15  | <b>0</b>     | <1   | 0    |
| Vanadium     | ppm    | ASTM D5185m |      | <b>&lt;1</b> | <1   | <1   |
| White Metal  | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | NONE |
| Yellow Metal | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | NONE |

**CONTAMINATION**

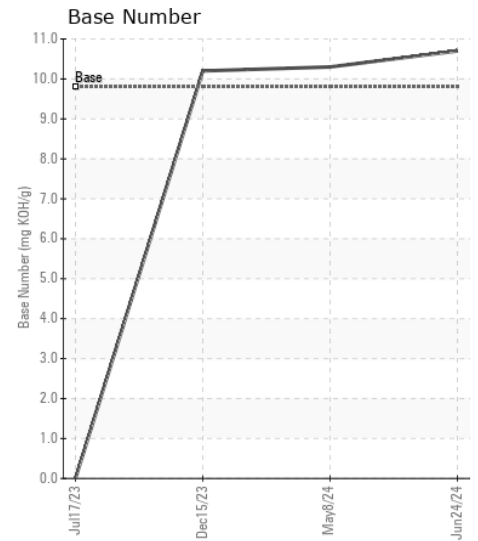
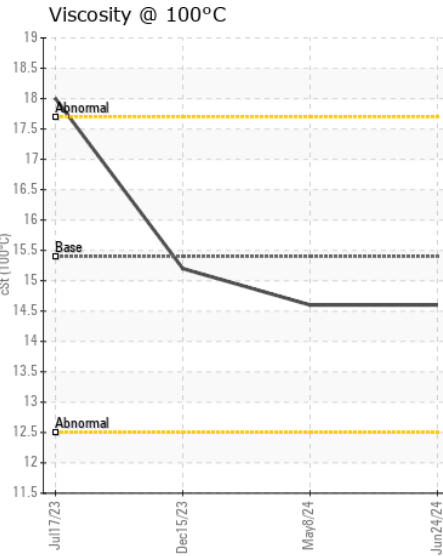
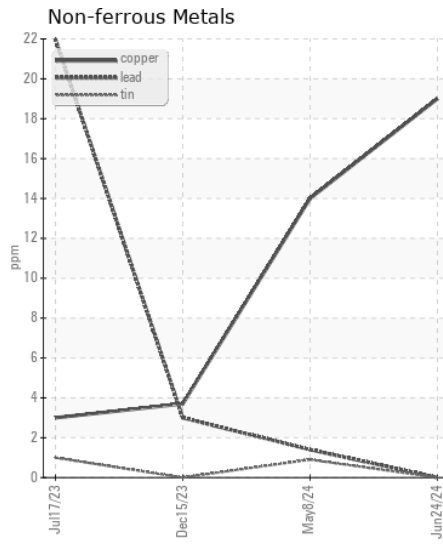
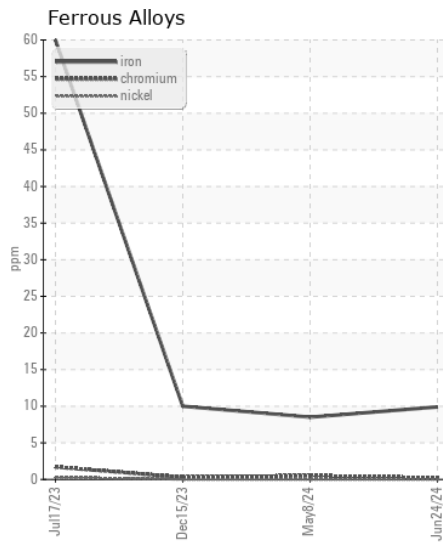
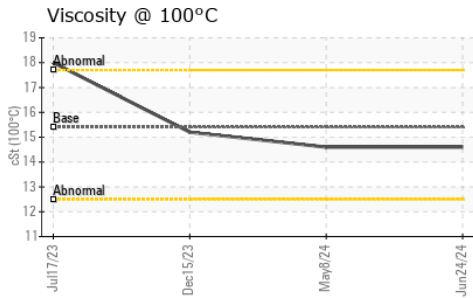
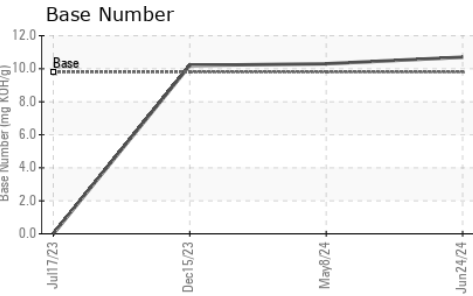
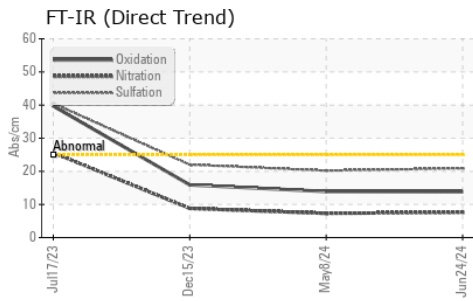
There is no indication of any contamination in the oil.

|                  |          |             |       |                |       |       |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon          | ppm      | ASTM D5185m | >25   | <b>3</b>       | 3     | 3     |
| Potassium        | ppm      | ASTM D5185m | >20   | <b>1</b>       | 2     | 0     |
| Fuel             |          | WC Method   | >5    | <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>2.1</b>     | 1.7   | 2.2   |
| Nitration        | Abs/cm   | *ASTM D7624 | >20   | <b>7.6</b>     | 7.3   | 8.8   |
| Sulfation        | Abs/.1mm | *ASTM D7415 | >30   | <b>20.9</b>    | 20.2  | 22.0  |
| 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     | >0.2  | <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>2</b>     | 1    | <1   |
| Boron            | ppm      | ASTM D5185m | 0    | <b>8</b>     | 5    | 8    |
| Barium           | ppm      | ASTM D5185m | 0    | <b>0</b>     | 0    | 0    |
| Molybdenum       | ppm      | ASTM D5185m | 60   | <b>66</b>    | 60   | 57   |
| Manganese        | ppm      | ASTM D5185m | 0    | <b>&lt;1</b> | <1   | 0    |
| Magnesium        | ppm      | ASTM D5185m | 1010 | <b>1084</b>  | 1007 | 896  |
| Calcium          | ppm      | ASTM D5185m | 1070 | <b>1302</b>  | 1211 | 1013 |
| Phosphorus       | ppm      | ASTM D5185m | 1150 | <b>1191</b>  | 1090 | 920  |
| Zinc             | ppm      | ASTM D5185m | 1270 | <b>1425</b>  | 1358 | 1131 |
| Sulfur           | ppm      | ASTM D5185m | 2060 | <b>4187</b>  | 4016 | 2928 |
| Oxidation        | Abs/.1mm | *ASTM D7414 | >25  | <b>13.8</b>  | 13.9 | 15.9 |
| Base Number (BN) | mg KOH/g | ASTM D2896  | 9.8  | <b>10.7</b>  | 10.3 | 10.2 |
| Visc @ 100°C     | cSt      | ASTM D445   | 15.4 | <b>14.6</b>  | 14.6 | 15.2 |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0120458  
**Lab Number** : 06223221  
**Unique Number** : 11101418  
**Test Package** : FLEET

**Received** : 28 Jun 2024  
**Tested** : 28 Jun 2024  
**Diagnosed** : 28 Jun 2024 - Wes Davis

**GFL Environmental - 904B - Menomonie**  
 1706 MIDWAY RD  
 MENOMONIE, WI  
 US 54751  
 Contact: ANDY KANE

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)

T: (715)202-3420

F: