



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

Area

**GFL004**

Machine Id

**NOT GIVEN GFL0119670**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON SHP 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

| Test           | UOM | Method      | Limit/Abn | Current            | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|----------|----------|
| Sample Number  |     | Client Info |           | <b>GFL0119670</b>  | ---      | ---      |
| Sample Date    |     | Client Info |           | <b>20 Jun 2024</b> | ---      | ---      |
| Machine Age    | hrs | Client Info |           | <b>12591</b>       | ---      | ---      |
| Oil Age        | hrs | Client Info |           | <b>0</b>           | ---      | ---      |
| Filter Age     | hrs | Client Info |           | <b>0</b>           | ---      | ---      |
| Oil Changed    |     | Client Info |           | <b>N/A</b>         | ---      | ---      |
| Filter Changed |     | Client Info |           | <b>N/A</b>         | ---      | ---      |
| Sample Status  |     |             |           | <b>NORMAL</b>      | ---      | ---      |

**WEAR**

All component wear rates are normal.

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

**CONTAMINATION**

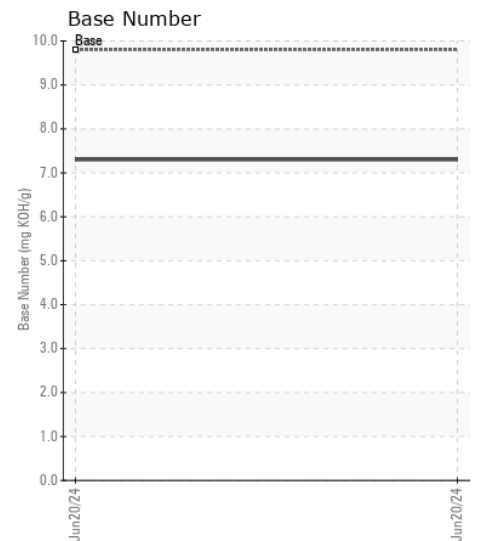
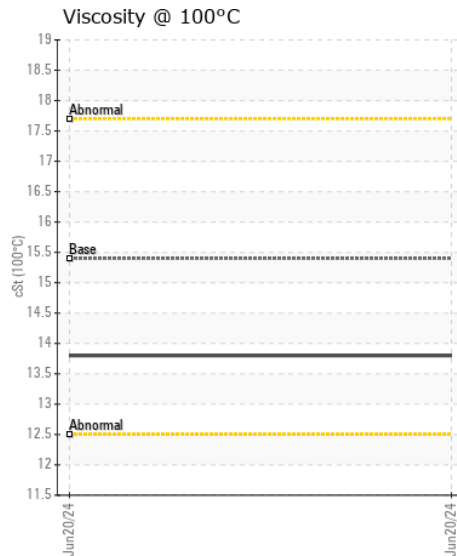
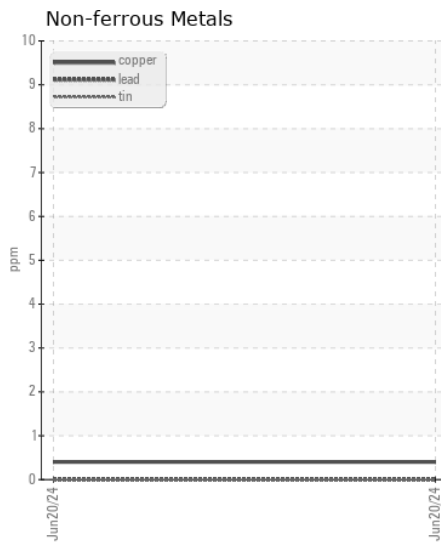
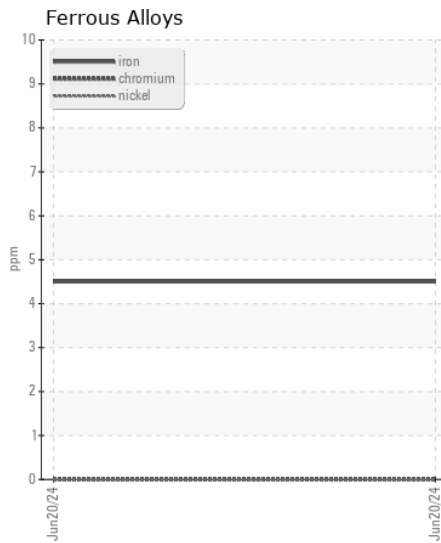
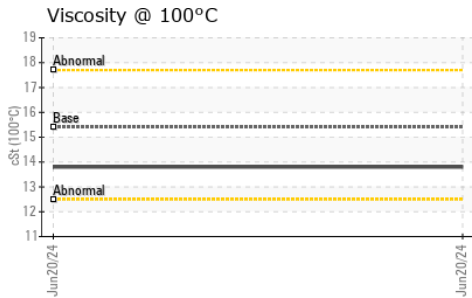
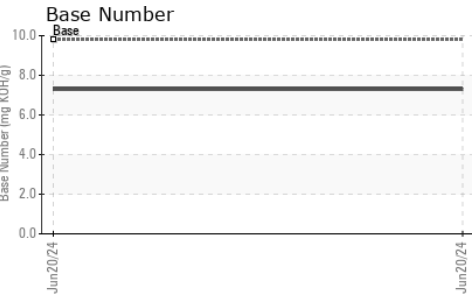
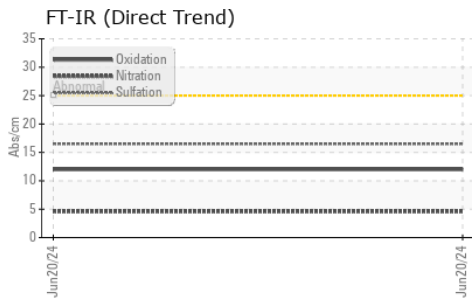
There is no indication of any contamination in the oil.

|                  |          |             |       |                |     |     |
|------------------|----------|-------------|-------|----------------|-----|-----|
| Silicon          | ppm      | ASTM D5185m | >25   | <b>7</b>       | --- | --- |
| Potassium        | ppm      | ASTM D5185m | >20   | <b>1</b>       | --- | --- |
| Fuel             |          | WC Method   | >5    | <b>&lt;1.0</b> | --- | --- |
| Water            |          | WC Method   | >0.2  | <b>NEG</b>     | --- | --- |
| Glycol           |          | WC Method   |       | <b>NEG</b>     | --- | --- |
| Soot %           | %        | *ASTM D7844 | >3    | <b>0.1</b>     | --- | --- |
| Nitration        | Abs/cm   | *ASTM D7624 | >20   | <b>4.6</b>     | --- | --- |
| Sulfation        | Abs/.1mm | *ASTM D7415 | >30   | <b>16.5</b>    | --- | --- |
| Silt             | scalar   | *Visual     | NONE  | <b>NONE</b>    | --- | --- |
| Debris           | scalar   | *Visual     | NONE  | <b>NONE</b>    | --- | --- |
| Sand/Dirt        | scalar   | *Visual     | NONE  | <b>NONE</b>    | --- | --- |
| Appearance       | scalar   | *Visual     | NORML | <b>NORML</b>   | --- | --- |
| Odor             | scalar   | *Visual     | NORML | <b>NORML</b>   | --- | --- |
| Emulsified Water | scalar   | *Visual     | >0.2  | <b>NEG</b>     | --- | --- |

**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>1</b>    | --- | --- |
| Boron            | ppm      | ASTM D5185m | 0    | <b>17</b>   | --- | --- |
| Barium           | ppm      | ASTM D5185m | 0    | <b>0</b>    | --- | --- |
| Molybdenum       | ppm      | ASTM D5185m | 60   | <b>56</b>   | --- | --- |
| Manganese        | ppm      | ASTM D5185m | 0    | <b>0</b>    | --- | --- |
| Magnesium        | ppm      | ASTM D5185m | 1010 | <b>907</b>  | --- | --- |
| Calcium          | ppm      | ASTM D5185m | 1070 | <b>1052</b> | --- | --- |
| Phosphorus       | ppm      | ASTM D5185m | 1150 | <b>1028</b> | --- | --- |
| Zinc             | ppm      | ASTM D5185m | 1270 | <b>1242</b> | --- | --- |
| Sulfur           | ppm      | ASTM D5185m | 2060 | <b>3673</b> | --- | --- |
| Oxidation        | Abs/.1mm | *ASTM D7414 | >25  | <b>12.0</b> | --- | --- |
| Base Number (BN) | mg KOH/g | ASTM D2896  | 9.8  | <b>7.3</b>  | --- | --- |
| Visc @ 100°C     | cSt      | ASTM D445   | 15.4 | <b>13.8</b> | --- | --- |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0119670  
**Lab Number** : 06239811  
**Unique Number** : 11128645  
**Test Package** : FLEET

**Received** : 17 Jul 2024  
**Tested** : 18 Jul 2024  
**Diagnosed** : 18 Jul 2024 - Wes Davis

**GFL Environmental - SIF Number**

US  
 Contact: Service Manager

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:  
 F: