



# OIL ANALYSIS REPORT

Sample Rating Trend

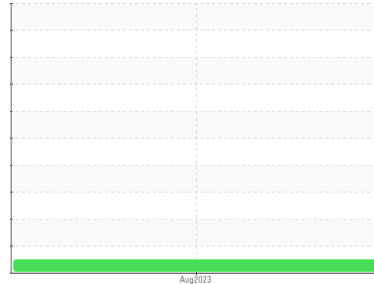
**NORMAL**



Machine Id  
**Komptech Cribus**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (12 LTR)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

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

## SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1 | history2 |
|---------------|-------------|-------------|--------------------|----------|----------|
| Sample Number | Client Info |             | <b>GFL0087354</b>  | ---      | ---      |
| Sample Date   | Client Info |             | <b>30 Aug 2023</b> | ---      | ---      |
| Machine Age   | hrs         | Client Info | <b>1948</b>        | ---      | ---      |
| Oil Age       | hrs         | Client Info | <b>668</b>         | ---      | ---      |
| Oil Changed   | Client Info |             | <b>Changed</b>     | ---      | ---      |
| Sample Status |             |             | <b>NORMAL</b>      | ---      | ---      |

## CONTAMINATION

|        | method    | limit/base | current        | history1 | history2 |
|--------|-----------|------------|----------------|----------|----------|
| Fuel   | WC Method | >2.1       | <b>&lt;1.0</b> | ---      | ---      |
| Glycol | WC Method |            | <b>NEG</b>     | ---      | ---      |

## WEAR METALS

|           | method | limit/base    | current | history1     | history2 |
|-----------|--------|---------------|---------|--------------|----------|
| Iron      | ppm    | ASTM D5185(m) | >51     | <b>10</b>    | ---      |
| Chromium  | ppm    | ASTM D5185(m) | >11     | <b>&lt;1</b> | ---      |
| Nickel    | ppm    | ASTM D5185(m) | >5      | <b>0</b>     | ---      |
| Titanium  | ppm    | ASTM D5185(m) |         | <b>&lt;1</b> | ---      |
| Silver    | ppm    | ASTM D5185(m) | >3      | <b>0</b>     | ---      |
| Aluminum  | ppm    | ASTM D5185(m) | >31     | <b>3</b>     | ---      |
| Lead      | ppm    | ASTM D5185(m) | >26     | <b>&lt;1</b> | ---      |
| Copper    | ppm    | ASTM D5185(m) | >26     | <b>25</b>    | ---      |
| Tin       | ppm    | ASTM D5185(m) | >4      | <b>&lt;1</b> | ---      |
| Antimony  | ppm    | ASTM D5185(m) |         | <b>0</b>     | ---      |
| Vanadium  | ppm    | ASTM D5185(m) |         | <b>0</b>     | ---      |
| Beryllium | ppm    | ASTM D5185(m) |         | <b>0</b>     | ---      |
| Cadmium   | ppm    | ASTM D5185(m) |         | <b>0</b>     | ---      |

## ADDITIVES

|            | method | limit/base    | current | history1     | history2 |
|------------|--------|---------------|---------|--------------|----------|
| Boron      | ppm    | ASTM D5185(m) | 0       | <b>2</b>     | ---      |
| Barium     | ppm    | ASTM D5185(m) | 0       | <b>0</b>     | ---      |
| Molybdenum | ppm    | ASTM D5185(m) | 60      | <b>60</b>    | ---      |
| Manganese  | ppm    | ASTM D5185(m) | 0       | <b>&lt;1</b> | ---      |
| Magnesium  | ppm    | ASTM D5185(m) | 1010    | <b>1018</b>  | ---      |
| Calcium    | ppm    | ASTM D5185(m) | 1070    | <b>1305</b>  | ---      |
| Phosphorus | ppm    | ASTM D5185(m) | 1150    | <b>1092</b>  | ---      |
| Zinc       | ppm    | ASTM D5185(m) | 1270    | <b>1344</b>  | ---      |
| Sulfur     | ppm    | ASTM D5185(m) | 2060    | <b>2603</b>  | ---      |
| Lithium    | ppm    | ASTM D5185(m) |         | <b>&lt;1</b> | ---      |

## CONTAMINANTS

|           | method | limit/base    | current | history1     | history2 |
|-----------|--------|---------------|---------|--------------|----------|
| Silicon   | ppm    | ASTM D5185(m) | >22     | <b>11</b>    | ---      |
| Sodium    | ppm    | ASTM D5185(m) | >31     | <b>3</b>     | ---      |
| Potassium | ppm    | ASTM D5185(m) | >20     | <b>&lt;1</b> | ---      |

## INFRA-RED

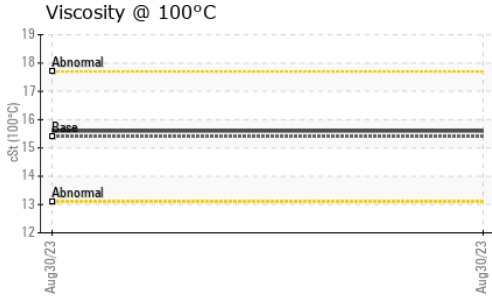
|           | method   | limit/base  | current | history1    | history2 |
|-----------|----------|-------------|---------|-------------|----------|
| Soot %    | %        | ASTM D7844* | >3      | <b>0</b>    | ---      |
| Nitration | Abs/cm   | ASTM D7624* | >20     | <b>10.0</b> | ---      |
| Sulfation | Abs/.1mm | ASTM D7415* | >30     | <b>23.6</b> | ---      |

## FLUID DEGRADATION

|           | method   | limit/base  | current | history1    | history2 |
|-----------|----------|-------------|---------|-------------|----------|
| Oxidation | Abs/.1mm | ASTM D7414* | >25     | <b>18.8</b> | ---      |



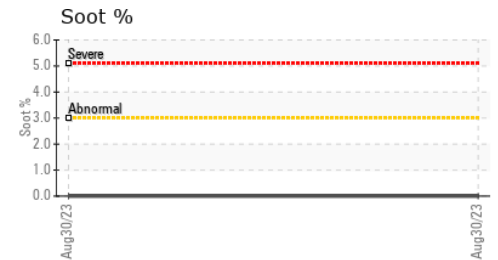
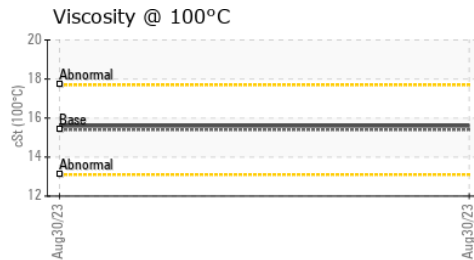
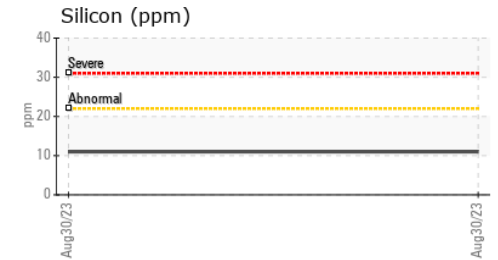
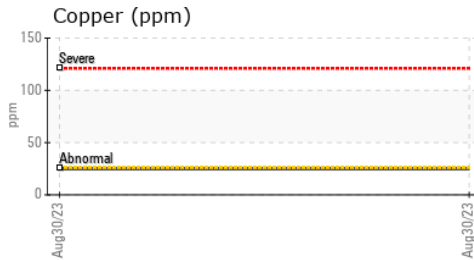
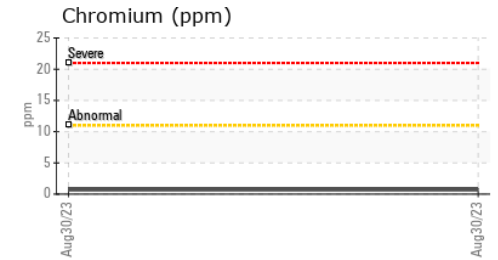
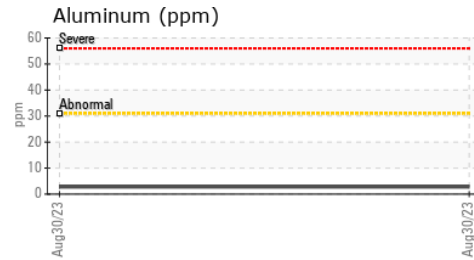
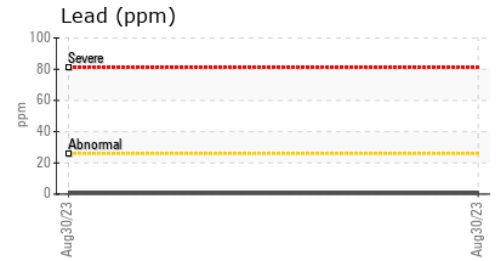
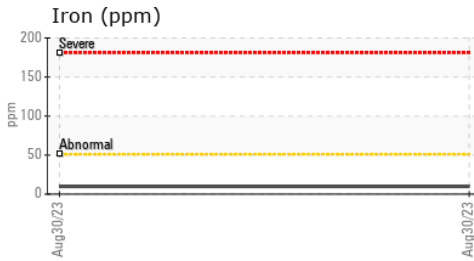
# OIL ANALYSIS REPORT



| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | Visual*    | NONE    | VLITE    | ---      |
| Yellow Metal     | scalar | Visual*    | NONE    | NONE     | ---      |
| Precipitate      | scalar | Visual*    | NONE    | NONE     | ---      |
| Silt             | scalar | Visual*    | NONE    | NONE     | ---      |
| Debris           | scalar | Visual*    | NONE    | VLITE    | ---      |
| Sand/Dirt        | scalar | Visual*    | NONE    | NONE     | ---      |
| Appearance       | scalar | Visual*    | NORML   | NORML    | ---      |
| Odor             | scalar | Visual*    | NORML   | NORML    | ---      |
| Emulsified Water | scalar | Visual*    | >0.21   | NEG      | ---      |
| Free Water       | scalar | Visual*    |         | NEG      | ---      |

| FLUID PROPERTIES | method | limit/base    | current | history1 | history2 |
|------------------|--------|---------------|---------|----------|----------|
| Visc @ 100°C     | cSt    | ASTM D7279(m) | 15.4    | 15.6     | ---      |

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 720 - Lafleche - Landfill  
**Sample No.** : GFL0087354 **Received** : 07 Sep 2023  
**Lab Number** : 02580871 **Diagnosed** : 07 Sep 2023  
**Unique Number** : 5641936 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: Visual )

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.

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