

# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**

 Machine Id  
**607328**

 Component  
**Diesel Engine**

 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- QTS)**
**DIAGNOSIS**
**Recommendation**

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

**Wear**

All component wear rates are normal.

**Contamination**

There is no indication of any contamination in the oil.

**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.

| SAMPLE INFORMATION |             | method      | limit/base | current            | history 1 | history 2 |
|--------------------|-------------|-------------|------------|--------------------|-----------|-----------|
| Sample Number      | Client Info |             |            | <b>PCA0078762</b>  | ---       | ---       |
| Sample Date        | Client Info |             |            | <b>28 Jun 2023</b> | ---       | ---       |
| Machine Age        | mls         | Client Info |            | <b>86608</b>       | ---       | ---       |
| Oil Age            | mls         | Client Info |            | <b>0</b>           | ---       | ---       |
| Oil Changed        | Client Info |             |            | <b>Not Chngd</b>   | ---       | ---       |
| Sample Status      |             |             |            | <b>NORMAL</b>      | ---       | ---       |

| CONTAMINATION |           | method | limit/base | current        | history 1 | history 2 |
|---------------|-----------|--------|------------|----------------|-----------|-----------|
| Fuel          | WC Method | >5     |            | <b>&lt;1.0</b> | ---       | ---       |
| Glycol        | WC Method |        |            | <b>NEG</b>     | ---       | ---       |

| WEAR METALS |     | method      | limit/base | current      | history 1 | history 2 |
|-------------|-----|-------------|------------|--------------|-----------|-----------|
| Iron        | ppm | ASTM D5185m | >100       | <b>29</b>    | ---       | ---       |
| Chromium    | ppm | ASTM D5185m | >20        | <b>2</b>     | ---       | ---       |
| Nickel      | ppm | ASTM D5185m | >4         | <b>&lt;1</b> | ---       | ---       |
| Titanium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | ---       | ---       |
| Silver      | ppm | ASTM D5185m | >3         | <b>&lt;1</b> | ---       | ---       |
| Aluminum    | ppm | ASTM D5185m | >20        | <b>13</b>    | ---       | ---       |
| Lead        | ppm | ASTM D5185m | >40        | <b>&lt;1</b> | ---       | ---       |
| Copper      | ppm | ASTM D5185m | >330       | <b>23</b>    | ---       | ---       |
| Tin         | ppm | ASTM D5185m | >15        | <b>&lt;1</b> | ---       | ---       |
| Vanadium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | ---       | ---       |
| Cadmium     | ppm | ASTM D5185m |            | <b>&lt;1</b> | ---       | ---       |

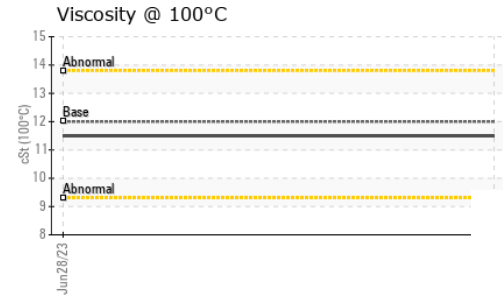
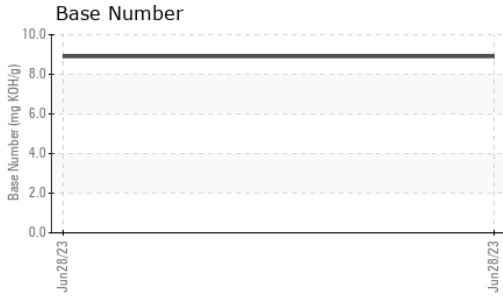
| ADDITIVES  |     | method      | limit/base | current      | history 1 | history 2 |
|------------|-----|-------------|------------|--------------|-----------|-----------|
| Boron      | ppm | ASTM D5185m | 2          | <b>9</b>     | ---       | ---       |
| Barium     | ppm | ASTM D5185m | 0          | <b>0</b>     | ---       | ---       |
| Molybdenum | ppm | ASTM D5185m | 50         | <b>58</b>    | ---       | ---       |
| Manganese  | ppm | ASTM D5185m | 0          | <b>&lt;1</b> | ---       | ---       |
| Magnesium  | ppm | ASTM D5185m | 950        | <b>860</b>   | ---       | ---       |
| Calcium    | ppm | ASTM D5185m | 1050       | <b>1122</b>  | ---       | ---       |
| Phosphorus | ppm | ASTM D5185m | 995        | <b>897</b>   | ---       | ---       |
| Zinc       | ppm | ASTM D5185m | 1180       | <b>1153</b>  | ---       | ---       |
| Sulfur     | ppm | ASTM D5185m | 2600       | <b>3302</b>  | ---       | ---       |

| CONTAMINANTS |     | method      | limit/base | current   | history 1 | history 2 |
|--------------|-----|-------------|------------|-----------|-----------|-----------|
| Silicon      | ppm | ASTM D5185m | >25        | <b>3</b>  | ---       | ---       |
| Sodium       | ppm | ASTM D5185m |            | <b>1</b>  | ---       | ---       |
| Potassium    | ppm | ASTM D5185m | >20        | <b>21</b> | ---       | ---       |

| INFRA-RED |          | method      | limit/base | current     | history 1 | history 2 |
|-----------|----------|-------------|------------|-------------|-----------|-----------|
| Soot %    | %        | *ASTM D7844 | >3         | <b>0.4</b>  | ---       | ---       |
| Nitration | Abs/cm   | *ASTM D7624 | >20        | <b>7.4</b>  | ---       | ---       |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30        | <b>19.6</b> | ---       | ---       |

| FLUID DEGRADATION |          | method      | limit/base | current     | history 1 | history 2 |
|-------------------|----------|-------------|------------|-------------|-----------|-----------|
| Oxidation         | Abs/.1mm | *ASTM D7414 | >25        | <b>14.8</b> | ---       | ---       |
| Base Number (BN)  | mg KOH/g | ASTM D2896  |            | <b>8.9</b>  | ---       | ---       |

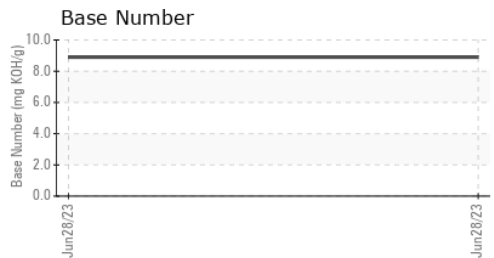
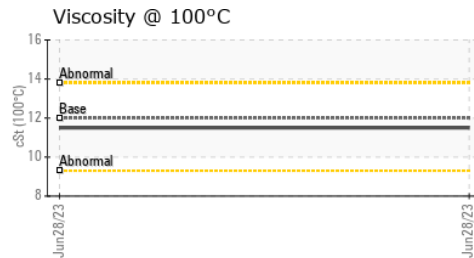
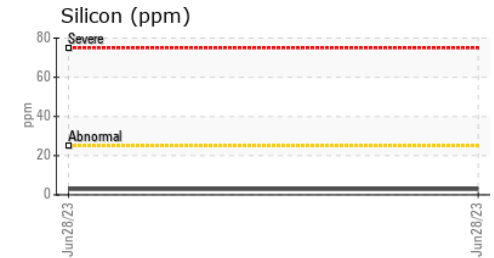
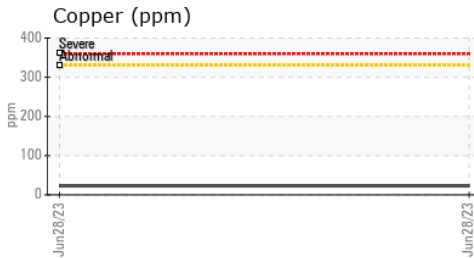
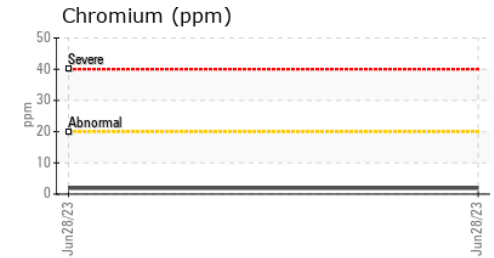
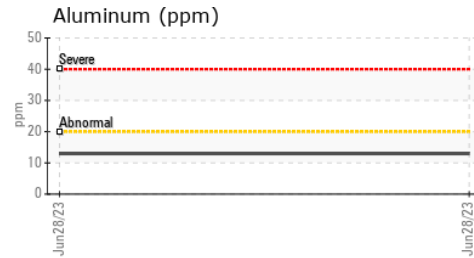
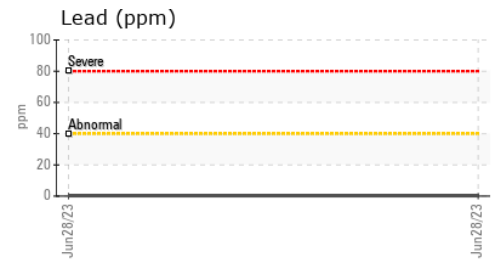
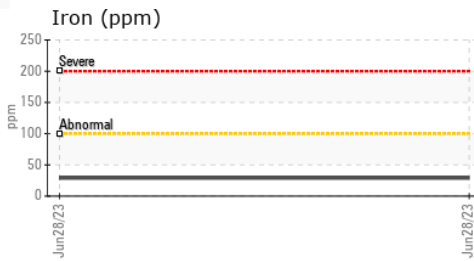
# OIL ANALYSIS REPORT



| VISUAL           | method | limit/base | current | history 1 | history 2 |
|------------------|--------|------------|---------|-----------|-----------|
| White Metal      | scalar | *Visual    | NONE    | NONE      | ---       |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE      | ---       |
| Precipitate      | scalar | *Visual    | NONE    | NONE      | ---       |
| Silt             | scalar | *Visual    | NONE    | NONE      | ---       |
| Debris           | scalar | *Visual    | NONE    | NONE      | ---       |
| Sand/Dirt        | scalar | *Visual    | NONE    | NONE      | ---       |
| Appearance       | scalar | *Visual    | NORML   | NORML     | ---       |
| Odor             | scalar | *Visual    | NORML   | NORML     | ---       |
| Emulsified Water | scalar | *Visual    | >0.2    | NEG       | ---       |
| Free Water       | scalar | *Visual    |         | NEG       | ---       |

| FLUID PROPERTIES | method | limit/base | current | history 1 | history 2 |
|------------------|--------|------------|---------|-----------|-----------|
| Visc @ 100°C     | cSt    | ASTM D445  | 12.00   | 11.5      | ---       |

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0078762 **Received** : 11 Jul 2023  
**Lab Number** : 05894820 **Diagnosed** : 11 Jul 2023  
**Unique Number** : 10550630 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MILLER TRUCK LEASING #117**  
 2666 LEISCZS BRIDGE RD  
 LEESPORT, PA  
 US 19533  
 Contact: JAMEY RITZ  
 jritz@millertransgroup.com

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: