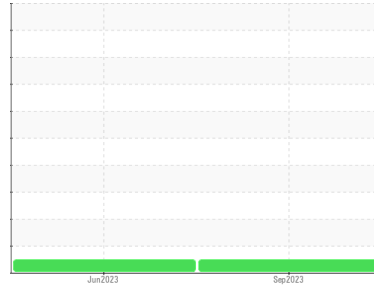


# OIL ANALYSIS REPORT

**Sample Rating Trend**

**NORMAL**

 Machine Id  
**707408**

 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            | history1    | history2 |
|--------------------|-------------|-------------|------------|--------------------|-------------|----------|
| Sample Number      | Client Info |             |            | <b>PCA0105304</b>  | PCA0100767  | ---      |
| Sample Date        | Client Info |             |            | <b>09 Sep 2023</b> | 22 Jun 2023 | ---      |
| Machine Age        | mls         | Client Info |            | <b>567770</b>      | 532551      | ---      |
| Oil Age            | mls         | Client Info |            | <b>567770</b>      | 532551      | ---      |
| Oil Changed        | Client Info |             |            | <b>Not Chngd</b>   | Changed     | ---      |
| Sample Status      |             |             |            | <b>NORMAL</b>      | NORMAL      | ---      |

| CONTAMINATION |           | method | limit/base | current        | history1 | history2 |
|---------------|-----------|--------|------------|----------------|----------|----------|
| Fuel          | WC Method | >5     |            | <b>&lt;1.0</b> | <1.0     | ---      |
| Glycol        | WC Method |        |            | <b>NEG</b>     | NEG      | ---      |

| WEAR METALS |     | method      | limit/base | current      | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185m | >100       | <b>6</b>     | 16       | ---      |
| Chromium    | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | 1        | ---      |
| Nickel      | ppm | ASTM D5185m | >4         | <b>0</b>     | 0        | ---      |
| Titanium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | 2        | ---      |
| Silver      | ppm | ASTM D5185m | >3         | <b>0</b>     | 0        | ---      |
| Aluminum    | ppm | ASTM D5185m | >20        | <b>5</b>     | 7        | ---      |
| Lead        | ppm | ASTM D5185m | >40        | <b>0</b>     | 0        | ---      |
| Copper      | ppm | ASTM D5185m | >330       | <b>2</b>     | 3        | ---      |
| Tin         | ppm | ASTM D5185m | >15        | <b>&lt;1</b> | <1       | ---      |
| Vanadium    | ppm | ASTM D5185m |            | <b>0</b>     | 0        | ---      |
| Cadmium     | ppm | ASTM D5185m |            | <b>0</b>     | 0        | ---      |

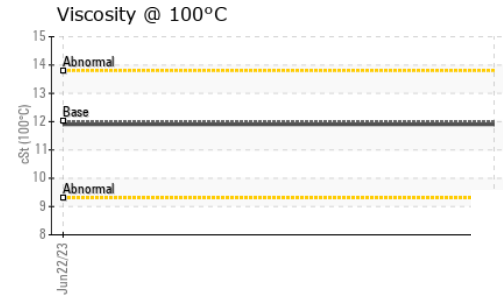
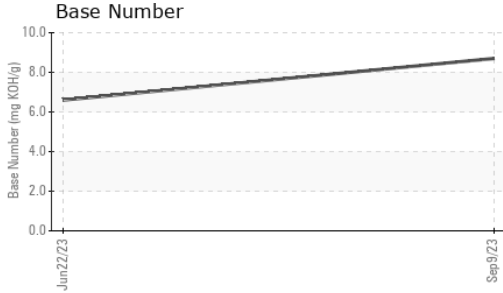
| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m | 2          | <b>2</b>     | 3        | ---      |
| Barium     | ppm | ASTM D5185m | 0          | <b>0</b>     | 0        | ---      |
| Molybdenum | ppm | ASTM D5185m | 50         | <b>64</b>    | 58       | ---      |
| Manganese  | ppm | ASTM D5185m | 0          | <b>&lt;1</b> | <1       | ---      |
| Magnesium  | ppm | ASTM D5185m | 950        | <b>944</b>   | 935      | ---      |
| Calcium    | ppm | ASTM D5185m | 1050       | <b>1216</b>  | 1262     | ---      |
| Phosphorus | ppm | ASTM D5185m | 995        | <b>1086</b>  | 1079     | ---      |
| Zinc       | ppm | ASTM D5185m | 1180       | <b>1327</b>  | 1363     | ---      |
| Sulfur     | ppm | ASTM D5185m | 2600       | <b>3760</b>  | 3472     | ---      |

| CONTAMINANTS |     | method      | limit/base | current      | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >25        | <b>4</b>     | 4        | ---      |
| Sodium       | ppm | ASTM D5185m |            | <b>&lt;1</b> | 1        | ---      |
| Potassium    | ppm | ASTM D5185m | >20        | <b>1</b>     | 2        | ---      |

| INFRA-RED |          | method      | limit/base | current     | history1 | history2 |
|-----------|----------|-------------|------------|-------------|----------|----------|
| Soot %    | %        | *ASTM D7844 | >3         | <b>0.3</b>  | 0.8      | ---      |
| Nitration | Abs/cm   | *ASTM D7624 | >20        | <b>7.0</b>  | 11.0     | ---      |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30        | <b>18.5</b> | 24.2     | ---      |

| FLUID DEGRADATION |          | method      | limit/base | current     | history1 | history2 |
|-------------------|----------|-------------|------------|-------------|----------|----------|
| Oxidation         | Abs/.1mm | *ASTM D7414 | >25        | <b>14.0</b> | 19.9     | ---      |
| Base Number (BN)  | mg KOH/g | ASTM D2896  |            | <b>8.7</b>  | 6.6      | ---      |

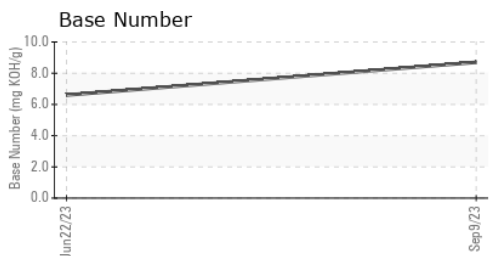
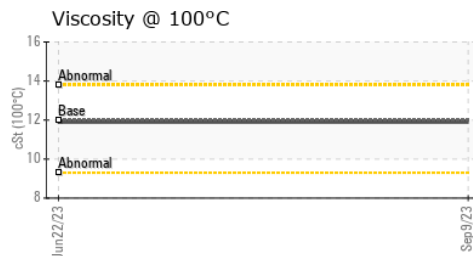
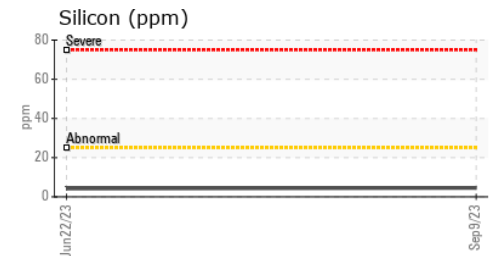
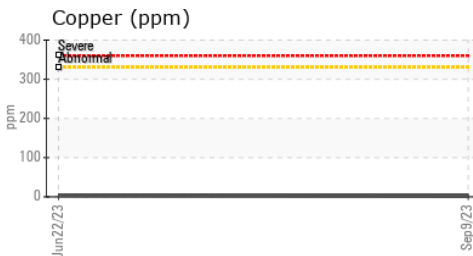
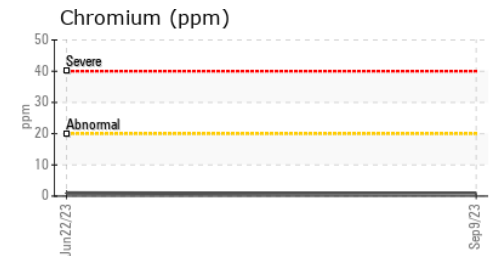
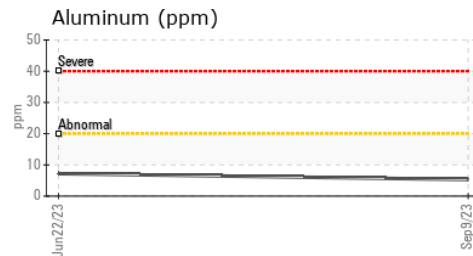
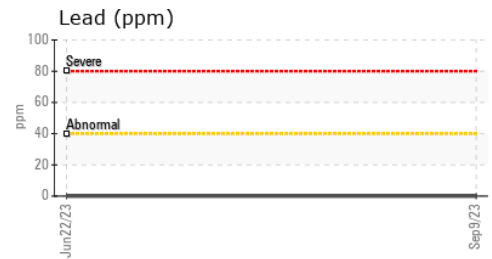
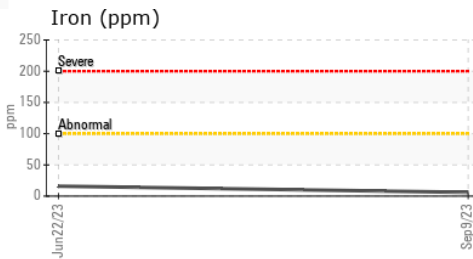
# OIL ANALYSIS REPORT



| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| 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 | history1    | history2 |     |
|------------------|--------|------------|---------|-------------|----------|-----|
| Visc @ 100°C     | cSt    | ASTM D445  | 12.00   | <b>11.9</b> | 11.9     | --- |

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0105304 **Received** : 19 Sep 2023  
**Lab Number** : **05955138** **Diagnosed** : 20 Sep 2023  
**Unique Number** : 10656351 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MILLER TRUCK LEASING #118**  
 2196 BENNETT ROAD  
 PHILADELPHIA, PA  
 US 19116  
 Contact: ROSTY VITER  
 rviter@millertransgroup.com  
 T: (215)552-9832  
 F: (215)552-9892

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)