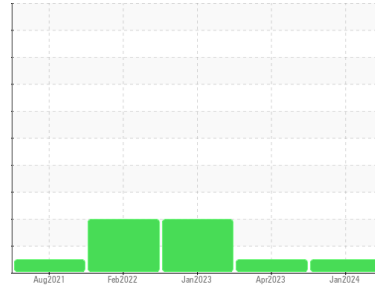


# OIL ANALYSIS REPORT

**Sample Rating Trend**

**NORMAL**

 Machine Id  
**721563**

 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>PCA0115220</b>  | PCA0095915  | PCA0088149  |
| Sample Date        | Client Info |             |            | <b>13 Jan 2024</b> | 17 Apr 2023 | 11 Jan 2023 |
| Machine Age        | mls         | Client Info |            | <b>265154</b>      | 180997      | 152263      |
| Oil Age            | mls         | Client Info |            | <b>0</b>           | 0           | 0           |
| Oil Changed        | Client Info |             |            | <b>Not Chngd</b>   | Not Chngd   | Changed     |
| Sample Status      |             |             |            | <b>NORMAL</b>      | NORMAL      | ABNORMAL    |

| CONTAMINATION |           | method | limit/base | current        | history1 | history2 |
|---------------|-----------|--------|------------|----------------|----------|----------|
| 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      |

| WEAR METALS |     | method      | limit/base | current      | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185m | >100       | <b>55</b>    | 48       | ▲ 141    |
| Chromium    | ppm | ASTM D5185m | >20        | <b>2</b>     | 2        | 5        |
| Nickel      | ppm | ASTM D5185m | >4         | <b>0</b>     | 0        | 0        |
| Titanium    | ppm | ASTM D5185m |            | <b>0</b>     | 0        | <1       |
| Silver      | ppm | ASTM D5185m | >3         | <b>0</b>     | 0        | <1       |
| Aluminum    | ppm | ASTM D5185m | >20        | <b>9</b>     | 12       | 45       |
| Lead        | ppm | ASTM D5185m | >40        | <b>0</b>     | 0        | 0        |
| Copper      | ppm | ASTM D5185m | >330       | <b>14</b>    | 33       | 91       |
| Tin         | ppm | ASTM D5185m | >15        | <b>&lt;1</b> | <1       | 4        |
| Antimony    | ppm | ASTM D5185m |            | <b>---</b>   | ---      | ---      |
| Vanadium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |
| Cadmium     | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |

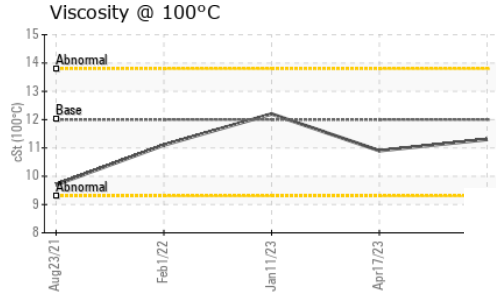
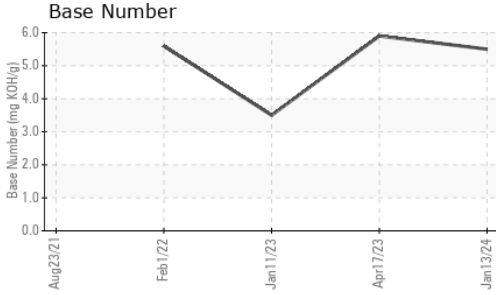
| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m | 2          | <b>2</b>     | 5        | 3        |
| Barium     | ppm | ASTM D5185m | 0          | <b>0</b>     | 1        | 2        |
| Molybdenum | ppm | ASTM D5185m | 50         | <b>59</b>    | 64       | 67       |
| Manganese  | ppm | ASTM D5185m | 0          | <b>&lt;1</b> | 1        | 2        |
| Magnesium  | ppm | ASTM D5185m | 950        | <b>947</b>   | 906      | 933      |
| Calcium    | ppm | ASTM D5185m | 1050       | <b>1060</b>  | 1120     | 1325     |
| Phosphorus | ppm | ASTM D5185m | 995        | <b>1024</b>  | 948      | 991      |
| Zinc       | ppm | ASTM D5185m | 1180       | <b>1194</b>  | 1213     | 1264     |
| Sulfur     | ppm | ASTM D5185m | 2600       | <b>2364</b>  | 2474     | 2246     |

| CONTAMINANTS |     | method      | limit/base | current   | history1 | history2 |
|--------------|-----|-------------|------------|-----------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >25        | <b>6</b>  | 4        | 9        |
| Sodium       | ppm | ASTM D5185m |            | <b>2</b>  | 2        | 0        |
| Potassium    | ppm | ASTM D5185m | >20        | <b>14</b> | 21       | 102      |

| INFRA-RED |          | method      | limit/base | current     | history1 | history2 |
|-----------|----------|-------------|------------|-------------|----------|----------|
| Soot %    | %        | *ASTM D7844 | >3         | <b>1.9</b>  | 1.2      | 2.9      |
| Nitration | Abs/cm   | *ASTM D7624 | >20        | <b>12.3</b> | 10.0     | 19.5     |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30        | <b>24.8</b> | 20.9     | 32.1     |

| FLUID DEGRADATION |          | method      | limit/base | current     | history1 | history2 |
|-------------------|----------|-------------|------------|-------------|----------|----------|
| Oxidation         | Abs/.1mm | *ASTM D7414 | >25        | <b>22.9</b> | 19.4     | 35.1     |
| Base Number (BN)  | mg KOH/g | ASTM D2896  |            | <b>5.5</b>  | 5.9      | ▲ 3.5    |

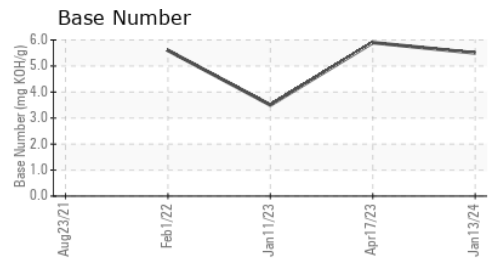
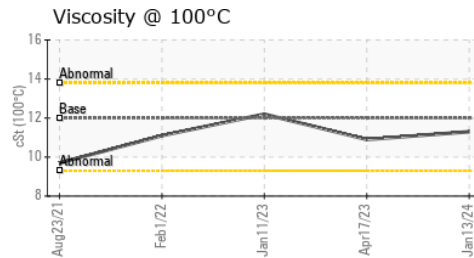
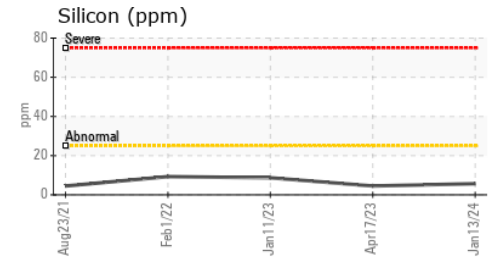
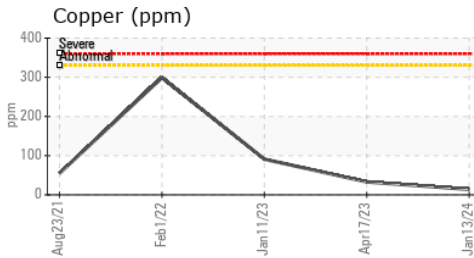
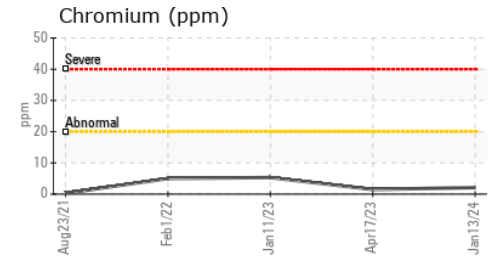
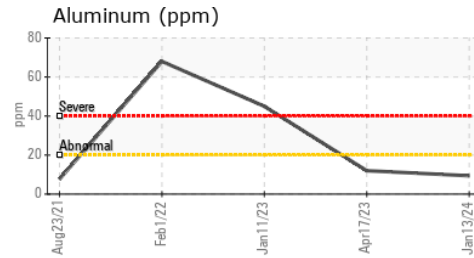
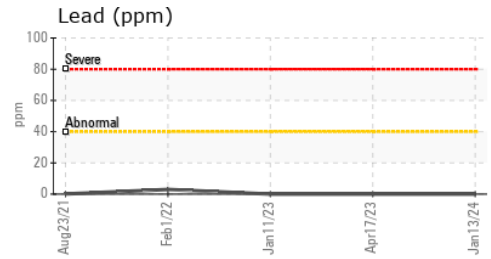
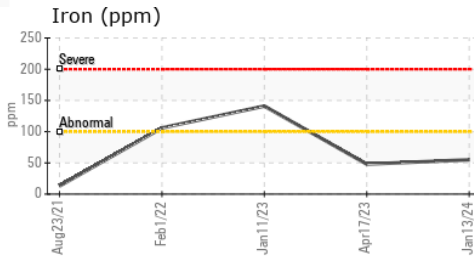
# OIL ANALYSIS REPORT



| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Silt             | scalar | *Visual    | NONE    | NONE     | NONE     |
| Debris           | scalar | *Visual    | NONE    | NONE     | NONE     |
| Sand/Dirt        | scalar | *Visual    | NONE    | NONE     | NONE     |
| Appearance       | scalar | *Visual    | NORML   | NORML    | NORML    |
| Odor             | scalar | *Visual    | NORML   | NORML    | NORML    |
| Emulsified Water | scalar | *Visual    | >0.2    | NEG      | NEG      |
| Free Water       | scalar | *Visual    |         | NEG      | NEG      |

| FLUID PROPERTIES | method | limit/base | current | history1    | history2 |      |
|------------------|--------|------------|---------|-------------|----------|------|
| Visc @ 100°C     | cSt    | ASTM D445  | 12.00   | <b>11.3</b> | 10.9     | 12.2 |

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0115220 **Received** : 22 Jan 2024  
**Lab Number** : 06066556 **Diagnosed** : 22 Jan 2024  
**Unique Number** : 10843233 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MILLER TRUCK LEASING #119**  
 39 INDUSTRIAL AVE  
 HASBROUCK HEIGHTS, NJ  
 US 07604  
 Contact: MIKE LONGETTE  
 mlongette@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: (201)528-7053