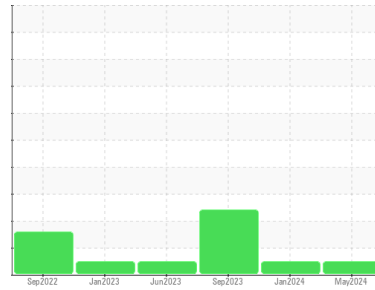


# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**125268**  
 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

Metal levels are typical for a new component breaking in.

### 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>PCA0127010</b>  | PCA0116989  | PCA0106287  |
| Sample Date   | Client Info |             | <b>15 May 2024</b> | 18 Jan 2024 | 27 Sep 2023 |
| Machine Age   | mls         | Client Info | <b>34914</b>       | 28354       | 23759       |
| Oil Age       | mls         | Client Info | <b>0</b>           | 0           | 0           |
| Oil Changed   | Client Info |             | <b>Changed</b>     | N/A         | Changed     |
| Sample Status |             |             | <b>NORMAL</b>      | NORMAL      | SEVERE      |

## CONTAMINATION

|        | method    | limit/base | current        | history1 | history2 |
|--------|-----------|------------|----------------|----------|----------|
| Fuel   | WC Method | >5         | <b>&lt;1.0</b> | 0.6      | ▲ 11.3   |
| 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>27</b>    | 36       | 20       |
| Chromium | ppm    | ASTM D5185m >20  | <b>0</b>     | <1       | <1       |
| Nickel   | ppm    | ASTM D5185m >4   | <b>0</b>     | 0        | <1       |
| Titanium | ppm    | ASTM D5185m      | <b>&lt;1</b> | 0        | 0        |
| Silver   | ppm    | ASTM D5185m >3   | <b>0</b>     | 0        | <1       |
| Aluminum | ppm    | ASTM D5185m >20  | <b>4</b>     | 2        | 3        |
| Lead     | ppm    | ASTM D5185m >40  | <b>&lt;1</b> | <1       | <1       |
| Copper   | ppm    | ASTM D5185m >330 | <b>4</b>     | 20       | 65       |
| Tin      | ppm    | ASTM D5185m >15  | <b>&lt;1</b> | 1        | 1        |
| Vanadium | ppm    | ASTM D5185m      | <b>0</b>     | 0        | <1       |
| Cadmium  | ppm    | ASTM D5185m      | <b>0</b>     | 0        | 0        |

## ADDITIVES

|            | method | limit/base       | current      | history1 | history2 |
|------------|--------|------------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185m 2    | <b>4</b>     | 6        | 19       |
| Barium     | ppm    | ASTM D5185m 0    | <b>0</b>     | 2        | <1       |
| Molybdenum | ppm    | ASTM D5185m 50   | <b>65</b>    | 60       | 44       |
| Manganese  | ppm    | ASTM D5185m 0    | <b>&lt;1</b> | <1       | 1        |
| Magnesium  | ppm    | ASTM D5185m 950  | <b>988</b>   | 892      | 609      |
| Calcium    | ppm    | ASTM D5185m 1050 | <b>1116</b>  | 1222     | 1627     |
| Phosphorus | ppm    | ASTM D5185m 995  | <b>1125</b>  | 1112     | 853      |
| Zinc       | ppm    | ASTM D5185m 1180 | <b>1306</b>  | 1198     | 1069     |
| Sulfur     | ppm    | ASTM D5185m 2600 | <b>3546</b>  | 3346     | 2580     |

## CONTAMINANTS

|           | method | limit/base      | current      | history1 | history2 |
|-----------|--------|-----------------|--------------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >25 | <b>6</b>     | 7        | 8        |
| Sodium    | ppm    | ASTM D5185m     | <b>1</b>     | 0        | 1        |
| Potassium | ppm    | ASTM D5185m >20 | <b>&lt;1</b> | 3        | 0        |

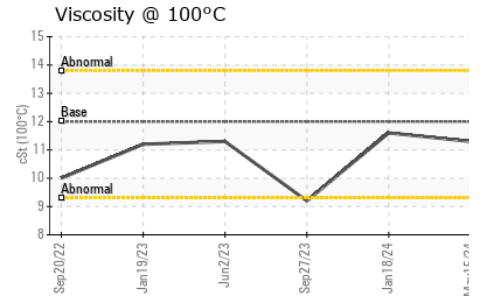
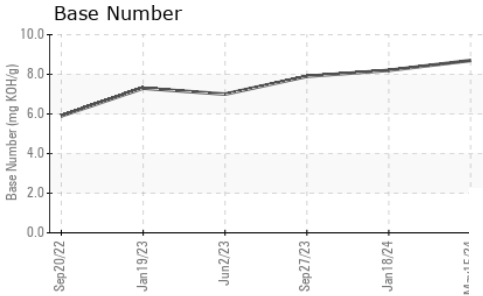
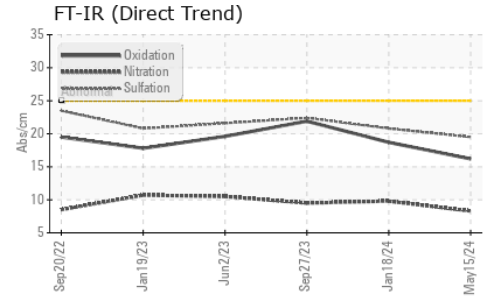
## INFRA-RED

|           | method   | limit/base      | current     | history1 | history2 |
|-----------|----------|-----------------|-------------|----------|----------|
| Soot %    | %        | *ASTM D7844 >3  | <b>0.5</b>  | 0.6      | 0.6      |
| Nitration | Abs/cm   | *ASTM D7624 >20 | <b>8.3</b>  | 9.8      | 9.5      |
| Sulfation | Abs/.1mm | *ASTM D7415 >30 | <b>19.5</b> | 20.8     | 22.4     |

## FLUID DEGRADATION

|                  | method   | limit/base      | current     | history1 | history2 |
|------------------|----------|-----------------|-------------|----------|----------|
| Oxidation        | Abs/.1mm | *ASTM D7414 >25 | <b>16.2</b> | 18.7     | 21.9     |
| Base Number (BN) | mg KOH/g | ASTM D2896      | <b>8.7</b>  | 8.2      | 7.9      |

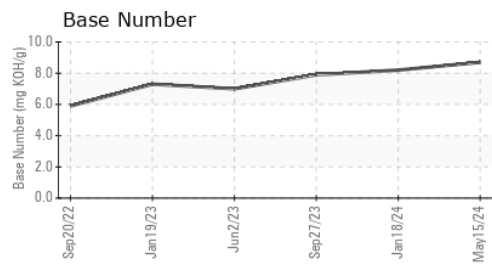
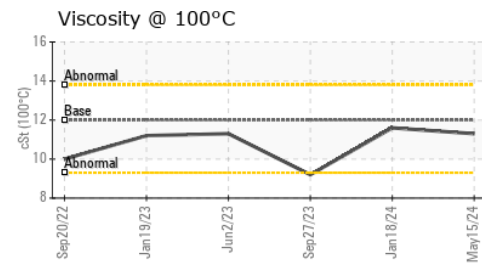
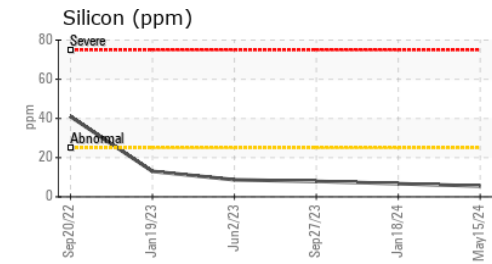
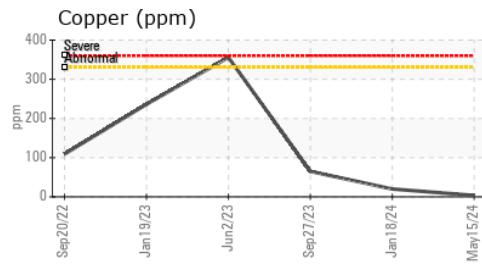
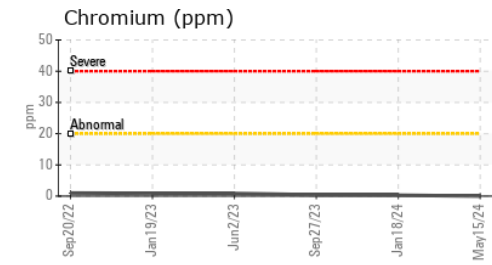
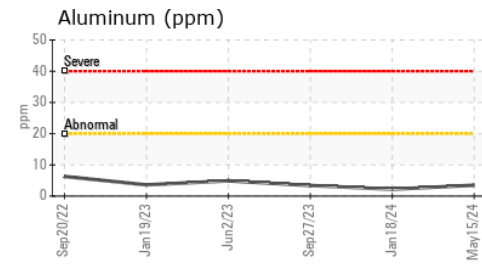
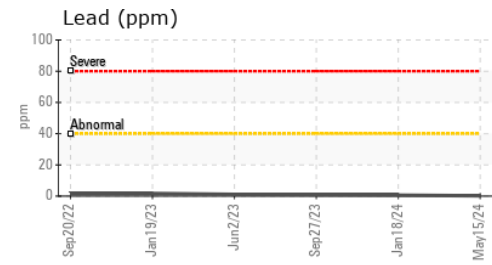
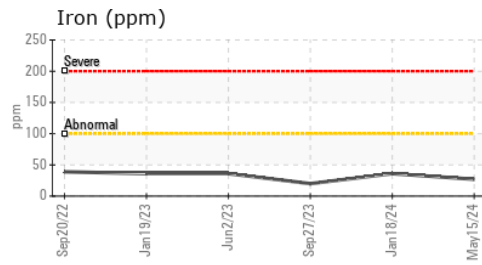
# OIL ANALYSIS REPORT



| PARAMETER        | 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> | 11.6     | ▲ 9.2    |

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0127010      **Received** : 24 May 2024  
**Lab Number** : **06191676**      **Tested** : 29 May 2024  
**Unique Number** : 11048428      **Diagnosed** : 29 May 2024 - 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)      F: (201)528-7053