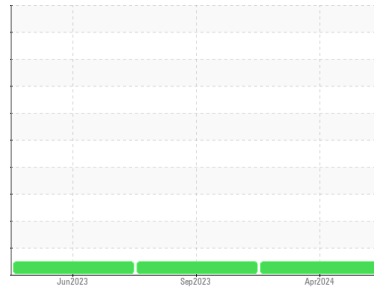


# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**5071**  
 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>PCA0123932</b>  | PCA0106292  | PCA0092338  |
| Sample Date        | Client Info |             |            | <b>11 Apr 2024</b> | 26 Sep 2023 | 22 Jun 2023 |
| Machine Age        | mls         | Client Info |            | <b>0</b>           | 98896       | 0           |
| Oil Age            | mls         | Client Info |            | <b>0</b>           | 0           | 0           |
| Oil Changed        | Client Info |             |            | <b>N/A</b>         | Changed     | N/A         |
| Sample Status      |             |             |            | <b>NORMAL</b>      | NORMAL      | NORMAL      |

| 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>19</b>    | 28       | 37       |
| Chromium    | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | <1       | <1       |
| Nickel      | ppm | ASTM D5185m | >4         | <b>&lt;1</b> | <1       | <1       |
| Titanium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |
| Silver      | ppm | ASTM D5185m | >3         | <b>&lt;1</b> | 0        | 0        |
| Aluminum    | ppm | ASTM D5185m | >20        | <b>3</b>     | 3        | 3        |
| Lead        | ppm | ASTM D5185m | >40        | <b>1</b>     | 2        | 2        |
| Copper      | ppm | ASTM D5185m | >330       | <b>3</b>     | 3        | 7        |
| Tin         | ppm | ASTM D5185m | >15        | <b>1</b>     | <1       | 1        |
| Vanadium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | <1       | 0        |
| Cadmium     | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |

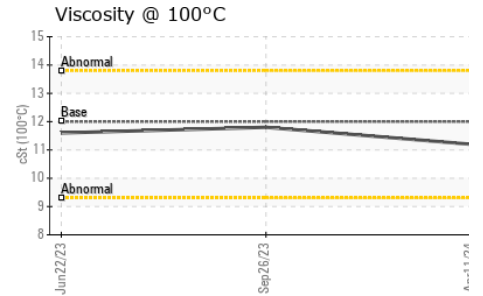
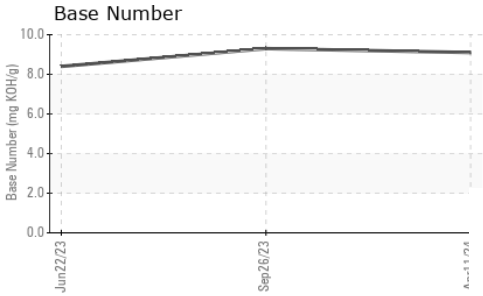
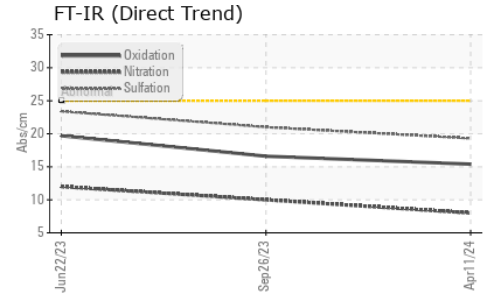
| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m | 2          | <b>2</b>     | 0        | 4        |
| Barium     | ppm | ASTM D5185m | 0          | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm | ASTM D5185m | 50         | <b>65</b>    | 65       | 66       |
| Manganese  | ppm | ASTM D5185m | 0          | <b>&lt;1</b> | <1       | <1       |
| Magnesium  | ppm | ASTM D5185m | 950        | <b>891</b>   | 1097     | 900      |
| Calcium    | ppm | ASTM D5185m | 1050       | <b>1063</b>  | 1185     | 1179     |
| Phosphorus | ppm | ASTM D5185m | 995        | <b>895</b>   | 1222     | 1018     |
| Zinc       | ppm | ASTM D5185m | 1180       | <b>1193</b>  | 1529     | 1248     |
| Sulfur     | ppm | ASTM D5185m | 2600       | <b>2962</b>  | 3611     | 3081     |

| CONTAMINANTS |     | method      | limit/base | current  | history1 | history2 |
|--------------|-----|-------------|------------|----------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >25        | <b>4</b> | 4        | 5        |
| Sodium       | ppm | ASTM D5185m |            | <b>0</b> | 0        | <1       |
| Potassium    | ppm | ASTM D5185m | >20        | <b>3</b> | <1       | 1        |

| INFRA-RED |          | method      | limit/base | current     | history1 | history2 |
|-----------|----------|-------------|------------|-------------|----------|----------|
| Soot %    | %        | *ASTM D7844 | >3         | <b>0.6</b>  | 1.3      | 1.5      |
| Nitration | Abs/cm   | *ASTM D7624 | >20        | <b>8.0</b>  | 10.0     | 12.0     |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30        | <b>19.3</b> | 21.0     | 23.4     |

| FLUID DEGRADATION |          | method      | limit/base | current     | history1 | history2 |
|-------------------|----------|-------------|------------|-------------|----------|----------|
| Oxidation         | Abs/.1mm | *ASTM D7414 | >25        | <b>15.4</b> | 16.6     | 19.7     |
| Base Number (BN)  | mg KOH/g | ASTM D2896  |            | <b>9.1</b>  | 9.3      | 8.4      |

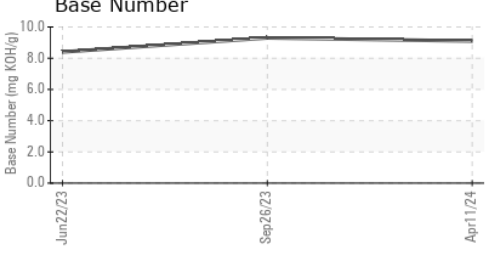
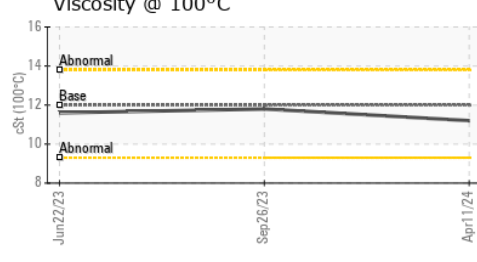
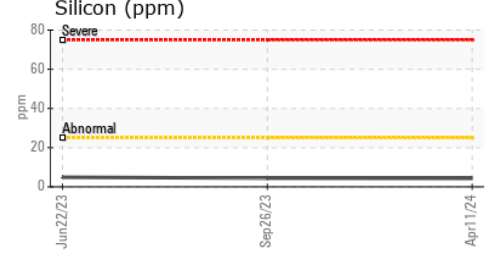
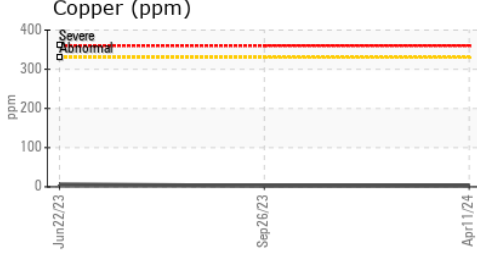
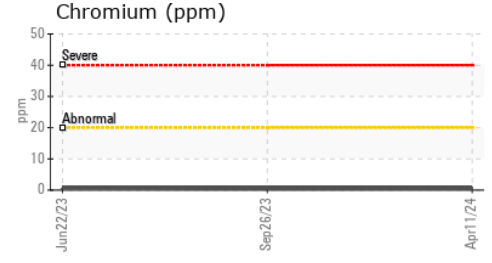
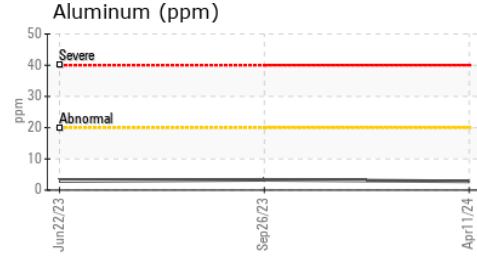
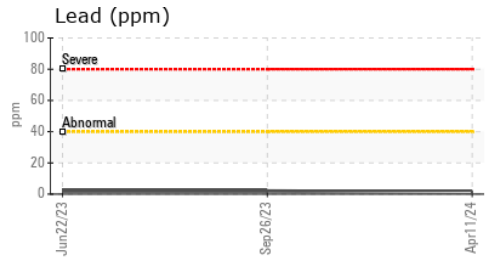
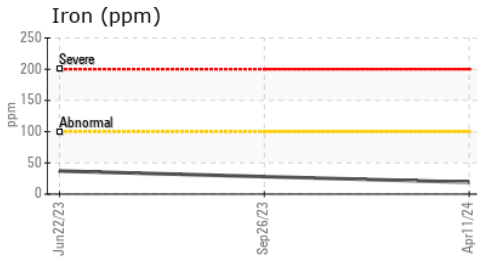
# OIL ANALYSIS REPORT



| 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 | 11.2    | 11.8     | 11.6     |

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0123932      **Received** : 23 Apr 2024  
**Lab Number** : 06157259      **Tested** : 24 Apr 2024  
**Unique Number** : 10992682      **Diagnosed** : 24 Apr 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