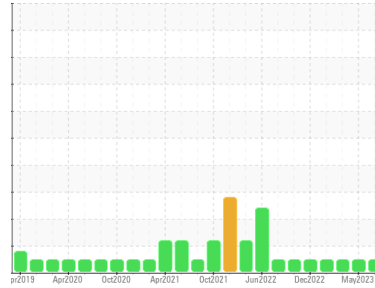


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**5053-197732**

Component  
**Diesel Engine**

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

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### 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>PCA0101349</b>  | PCA0098072  | PCA0094275  |        |
| Sample Date   | Client Info | <b>12 Jul 2023</b> | 24 May 2023 | 22 Mar 2023 |        |
| Machine Age   | mls         | Client Info        | <b>0</b>    | 325804      | 311912 |
| Oil Age       | mls         | Client Info        | <b>0</b>    | 0           | 0      |
| Oil Changed   | Client Info | <b>N/A</b>         | Changed     | Changed     |        |
| 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     |
| Glycol | WC Method    | <b>NEG</b>     | NEG      | NEG      |

## WEAR METALS

| method   | limit/base           | current      | history1 | history2 |
|----------|----------------------|--------------|----------|----------|
| Iron     | ppm ASTM D5185m >100 | <b>20</b>    | 14       | 13       |
| Chromium | ppm ASTM D5185m >20  | <b>&lt;1</b> | <1       | <1       |
| Nickel   | ppm ASTM D5185m >4   | <b>0</b>     | <1       | 0        |
| Titanium | ppm ASTM D5185m      | <b>0</b>     | 0        | 0        |
| Silver   | ppm ASTM D5185m >3   | <b>&lt;1</b> | 0        | 0        |
| Aluminum | ppm ASTM D5185m >20  | <b>2</b>     | 4        | 2        |
| Lead     | ppm ASTM D5185m >40  | <b>&lt;1</b> | 2        | <1       |
| Copper   | ppm ASTM D5185m >330 | <b>&lt;1</b> | 3        | <1       |
| Tin      | ppm ASTM D5185m >15  | <b>0</b>     | 1        | <1       |
| Vanadium | ppm ASTM D5185m      | <b>0</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>0</b>     | 7        | 8        |
| Barium     | ppm ASTM D5185m 0    | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm ASTM D5185m 50   | <b>68</b>    | 65       | 58       |
| Manganese  | ppm ASTM D5185m 0    | <b>&lt;1</b> | 1        | <1       |
| Magnesium  | ppm ASTM D5185m 950  | <b>1111</b>  | 982      | 920      |
| Calcium    | ppm ASTM D5185m 1050 | <b>1208</b>  | 1194     | 1222     |
| Phosphorus | ppm ASTM D5185m 995  | <b>1159</b>  | 1115     | 992      |
| Zinc       | ppm ASTM D5185m 1180 | <b>1448</b>  | 1387     | 1303     |
| Sulfur     | ppm ASTM D5185m 2600 | <b>3952</b>  | 3881     | 3218     |

## CONTAMINANTS

| method    | limit/base          | current   | history1 | history2 |
|-----------|---------------------|-----------|----------|----------|
| Silicon   | ppm ASTM D5185m >25 | <b>3</b>  | 4        | 4        |
| Sodium    | ppm ASTM D5185m     | <b>10</b> | 13       | 18       |
| Potassium | ppm ASTM D5185m >20 | <b>0</b>  | 4        | 5        |

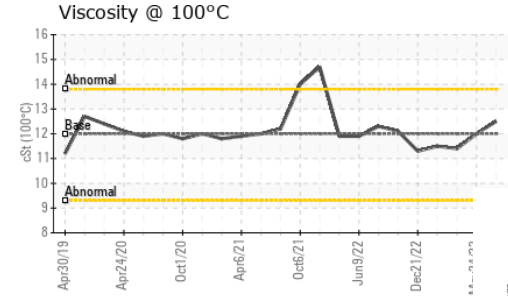
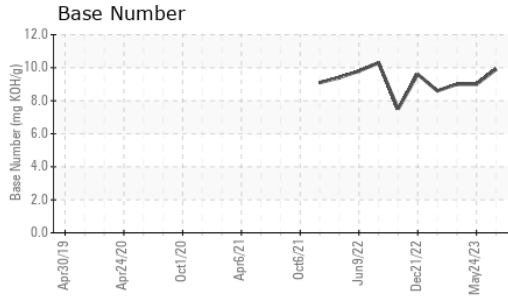
## INFRA-RED

| method    | limit/base               | current     | history1 | history2 |
|-----------|--------------------------|-------------|----------|----------|
| Soot %    | % *ASTM D7844 >3         | <b>2.6</b>  | 2        | 1.3      |
| Nitration | Abs/cm *ASTM D7624 >20   | <b>13.4</b> | 12.5     | 10.5     |
| Sulfation | Abs/.1mm *ASTM D7415 >30 | <b>25.3</b> | 24.4     | 21.7     |

## FLUID DEGRADATION

| method           | limit/base               | current     | history1 | history2 |
|------------------|--------------------------|-------------|----------|----------|
| Oxidation        | Abs/.1mm *ASTM D7414 >25 | <b>20.5</b> | 21.4     | 17.6     |
| Base Number (BN) | mg KOH/g ASTM D2896      | <b>9.9</b>  | 9.0      | 9.0      |

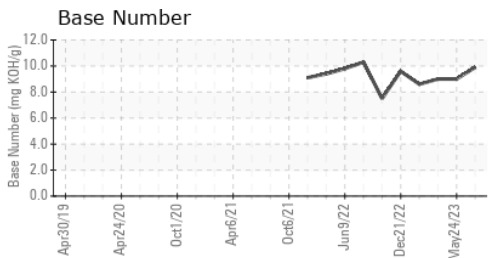
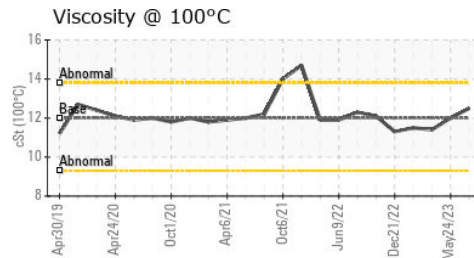
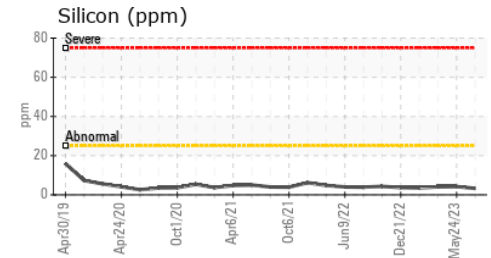
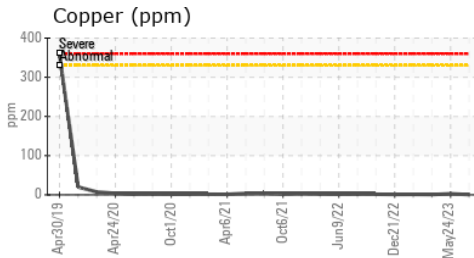
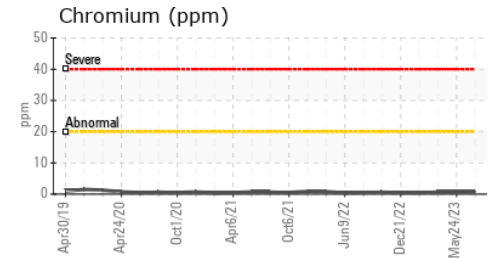
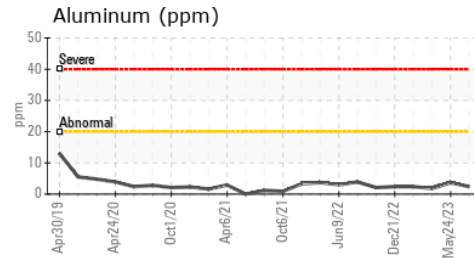
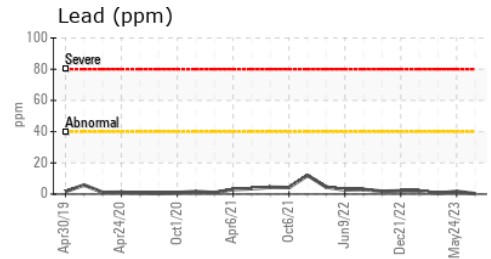
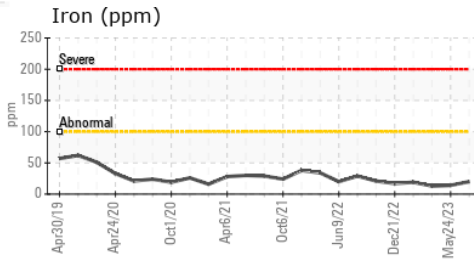
# OIL ANALYSIS REPORT



| 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   | 12.5     | 12.0     |

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0101349 **Received** : 20 Jul 2023  
**Lab Number** : 05903048 **Diagnosed** : 20 Jul 2023  
**Unique Number** : 10564404 **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:  
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