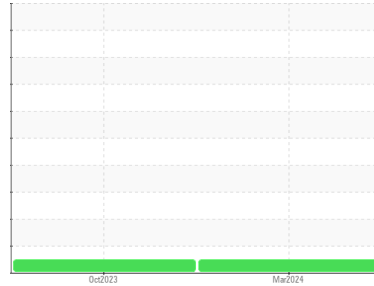


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**V3357**

Component  
**Diesel Engine**

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

## 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>PCA0112739</b>  | PCA0099395  | ---      |
| Sample Date   | Client Info |             | <b>14 Mar 2024</b> | 31 Oct 2023 | ---      |
| Machine Age   | mls         | Client Info | <b>293646</b>      | 279975      | ---      |
| Oil Age       | mls         | Client Info | <b>0</b>           | 0           | ---      |
| Oil Changed   | Client Info |             | <b>N/A</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     | ---      |
| Water  | WC Method | >0.2       | <b>NEG</b>     | NEG      | ---      |
| Glycol | WC Method |            | <b>NEG</b>     | NEG      | ---      |

## WEAR METALS

|          | method | limit/base       | current      | history1 | history2 |
|----------|--------|------------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >100 | <b>21</b>    | 21       | ---      |
| Chromium | ppm    | ASTM D5185m >20  | <b>2</b>     | 1        | ---      |
| Nickel   | ppm    | ASTM D5185m >4   | <b>&lt;1</b> | 0        | ---      |
| Titanium | ppm    | ASTM D5185m      | <b>&lt;1</b> | 0        | ---      |
| Silver   | ppm    | ASTM D5185m >3   | <b>0</b>     | 0        | ---      |
| Aluminum | ppm    | ASTM D5185m >20  | <b>10</b>    | 10       | ---      |
| Lead     | ppm    | ASTM D5185m >40  | <b>0</b>     | 0        | ---      |
| Copper   | ppm    | ASTM D5185m >330 | <b>4</b>     | 6        | ---      |
| 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>4</b>     | 9        | ---      |
| Barium     | ppm    | ASTM D5185m 0    | <b>0</b>     | 0        | ---      |
| Molybdenum | ppm    | ASTM D5185m 50   | <b>59</b>    | 58       | ---      |
| Manganese  | ppm    | ASTM D5185m 0    | <b>&lt;1</b> | <1       | ---      |
| Magnesium  | ppm    | ASTM D5185m 950  | <b>894</b>   | 887      | ---      |
| Calcium    | ppm    | ASTM D5185m 1050 | <b>1194</b>  | 1134     | ---      |
| Phosphorus | ppm    | ASTM D5185m 995  | <b>1029</b>  | 971      | ---      |
| Zinc       | ppm    | ASTM D5185m 1180 | <b>1252</b>  | 1132     | ---      |
| Sulfur     | ppm    | ASTM D5185m 2600 | <b>3310</b>  | 2755     | ---      |

## CONTAMINANTS

|           | method | limit/base      | current  | history1 | history2 |
|-----------|--------|-----------------|----------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >25 | <b>5</b> | 4        | ---      |
| Sodium    | ppm    | ASTM D5185m     | <b>3</b> | 1        | ---      |
| Potassium | ppm    | ASTM D5185m >20 | <b>5</b> | 2        | ---      |

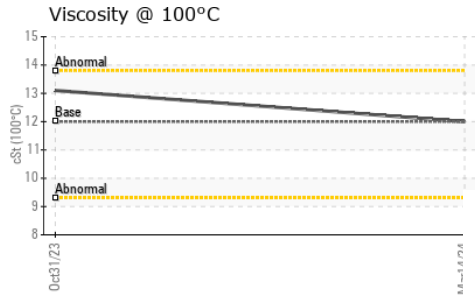
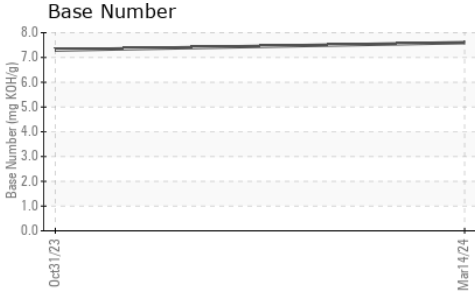
## INFRA-RED

|           | method   | limit/base      | current     | history1 | history2 |
|-----------|----------|-----------------|-------------|----------|----------|
| Soot %    | %        | *ASTM D7844 >3  | <b>0.6</b>  | 0.8      | ---      |
| Nitration | Abs/cm   | *ASTM D7624 >20 | <b>8.6</b>  | 10.0     | ---      |
| Sulfation | Abs/.1mm | *ASTM D7415 >30 | <b>19.3</b> | 20.9     | ---      |

## FLUID DEGRADATION

|                  | method   | limit/base      | current     | history1 | history2 |
|------------------|----------|-----------------|-------------|----------|----------|
| Oxidation        | Abs/.1mm | *ASTM D7414 >25 | <b>15.3</b> | 18.1     | ---      |
| Base Number (BN) | mg KOH/g | ASTM D2896      | <b>7.6</b>  | 7.3      | ---      |

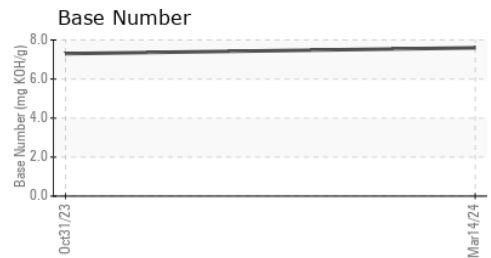
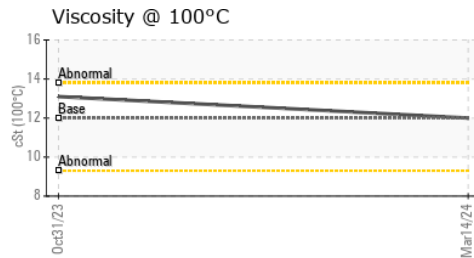
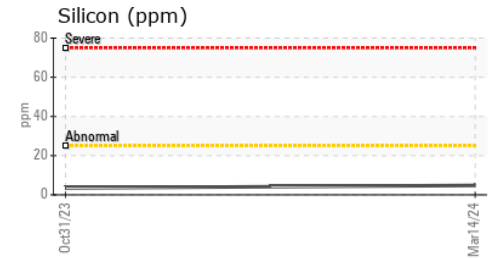
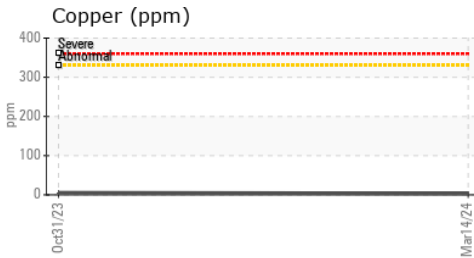
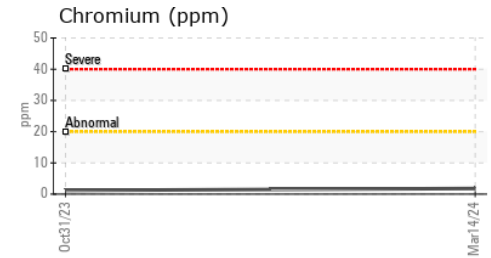
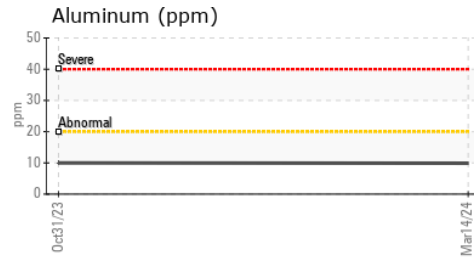
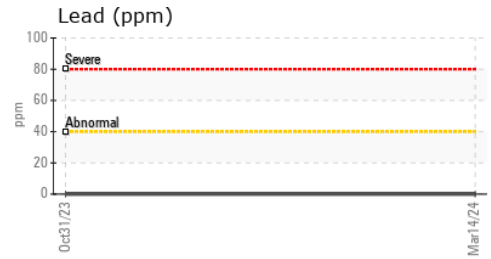
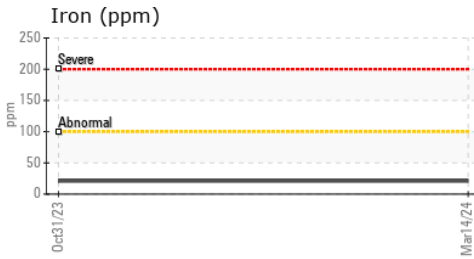
# OIL ANALYSIS REPORT



| 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   | 13.1     | ---      |

### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0112739      **Received** : 19 Mar 2024  
**Lab Number** : 06122002      **Tested** : 19 Mar 2024  
**Unique Number** : 10936153      **Diagnosed** : 19 Mar 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MILLER TRUCK LEASING #137**  
 361 ROUTE 312  
 BREWSTER, NY  
 US 10509  
 Contact: Robert Beckhusen  
 rbeckhusen@millertransgroup.com  
 T: (845)779-1064  
 F:

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)