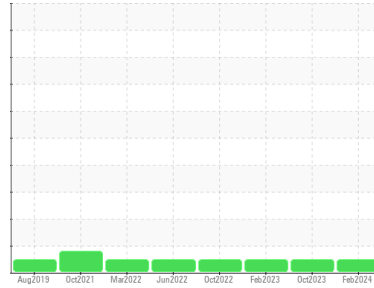


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**288110**

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>PCA0117001</b>  | PCA0106301  | PCA0092394  |
| Sample Date   | Client Info     | <b>06 Feb 2024</b> | 06 Oct 2023 | 14 Feb 2023 |
| Machine Age   | mls Client Info | <b>97484</b>       | 94760       | 84318       |
| Oil Age       | mls Client Info | <b>0</b>           | 0           | 0           |
| Oil Changed   | Client Info     | <b>Not Chngd</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     |
| 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>24</b>    | 70       | 23       |
| Chromium | ppm ASTM D5185m >20  | <b>&lt;1</b> | <1       | 0        |
| Nickel   | ppm ASTM D5185m >4   | <b>0</b>     | <1       | 0        |
| Titanium | ppm ASTM D5185m      | <b>&lt;1</b> | 0        | 0        |
| Silver   | ppm ASTM D5185m >3   | <b>0</b>     | 0        | 0        |
| Aluminum | ppm ASTM D5185m >20  | <b>2</b>     | 6        | 3        |
| Lead     | ppm ASTM D5185m >40  | <b>0</b>     | <1       | 0        |
| Copper   | ppm ASTM D5185m >330 | <b>2</b>     | 2        | 0        |
| Tin      | ppm ASTM D5185m >15  | <b>&lt;1</b> | <1       | 0        |
| Vanadium | ppm ASTM D5185m      | <b>&lt;1</b> | <1       | 0        |
| Cadmium  | ppm ASTM D5185m      | <b>0</b>     | 0        | 0        |

## ADDITIVES

| method     | limit/base           | current      | history1 | history2 |
|------------|----------------------|--------------|----------|----------|
| Boron      | ppm ASTM D5185m 2    | <b>5</b>     | 4        | 17       |
| Barium     | ppm ASTM D5185m 0    | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm ASTM D5185m 50   | <b>60</b>    | 68       | 62       |
| Manganese  | ppm ASTM D5185m 0    | <b>&lt;1</b> | <1       | <1       |
| Magnesium  | ppm ASTM D5185m 950  | <b>912</b>   | 1051     | 832      |
| Calcium    | ppm ASTM D5185m 1050 | <b>1061</b>  | 1200     | 1154     |
| Phosphorus | ppm ASTM D5185m 995  | <b>1022</b>  | 1215     | 898      |
| Zinc       | ppm ASTM D5185m 1180 | <b>1178</b>  | 1520     | 1130     |
| Sulfur     | ppm ASTM D5185m 2600 | <b>2948</b>  | 3506     | 3092     |

## CONTAMINANTS

| method    | limit/base          | current  | history1 | history2 |
|-----------|---------------------|----------|----------|----------|
| Silicon   | ppm ASTM D5185m >25 | <b>0</b> | 6        | 3        |
| Sodium    | ppm ASTM D5185m     | <b>1</b> | 0        | 0        |
| Potassium | ppm ASTM D5185m >20 | <b>0</b> | 4        | 2        |

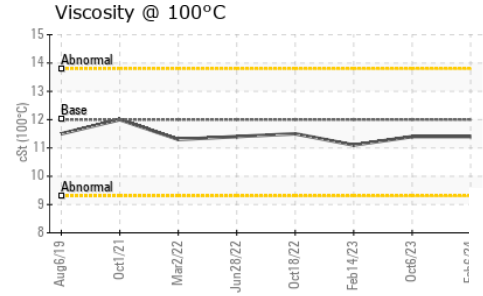
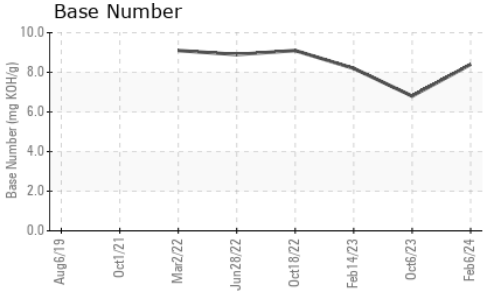
## INFRA-RED

| method    | limit/base               | current     | history1 | history2 |
|-----------|--------------------------|-------------|----------|----------|
| Soot %    | % *ASTM D7844 >3         | <b>0.5</b>  | 0.7      | 0.6      |
| Nitration | Abs/cm *ASTM D7624 >20   | <b>8.3</b>  | 11.0     | 9.1      |
| Sulfation | Abs/.1mm *ASTM D7415 >30 | <b>18.7</b> | 20.4     | 19.2     |

## FLUID DEGRADATION

| method           | limit/base               | current     | history1 | history2 |
|------------------|--------------------------|-------------|----------|----------|
| Oxidation        | Abs/.1mm *ASTM D7414 >25 | <b>15.0</b> | 17.9     | 15.5     |
| Base Number (BN) | mg KOH/g ASTM D2896      | <b>8.4</b>  | 6.8      | 8.2      |

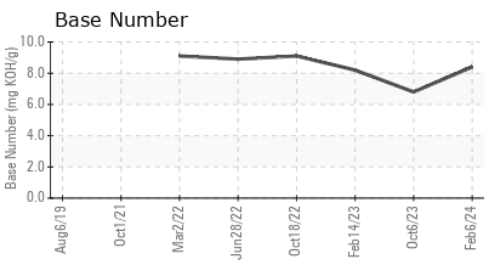
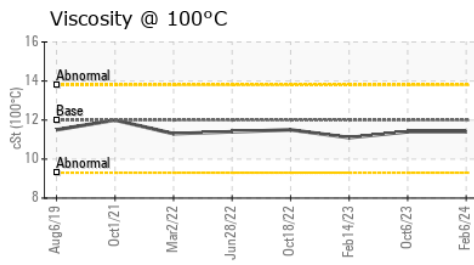
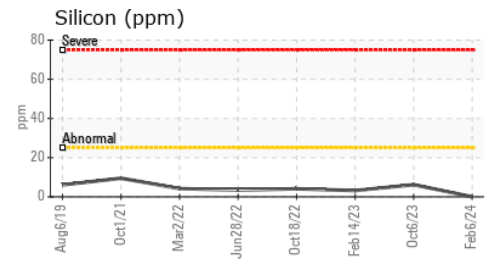
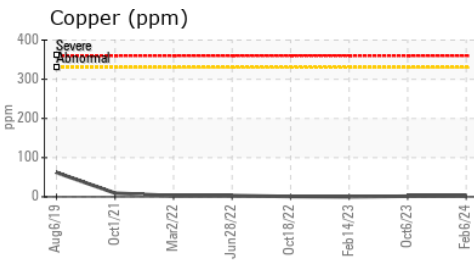
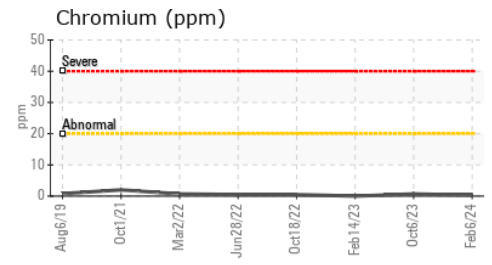
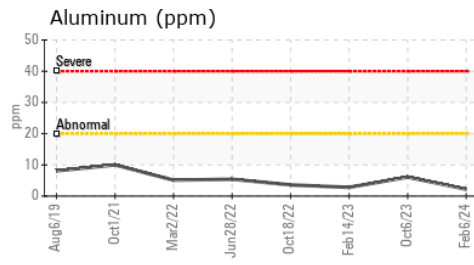
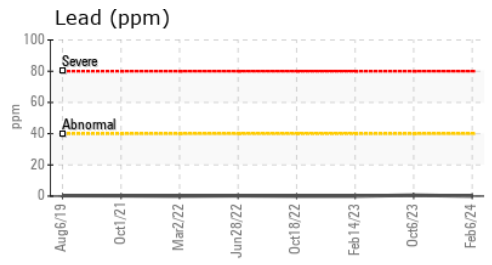
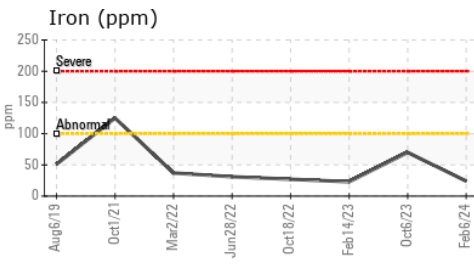
# OIL ANALYSIS REPORT



| 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   | 11.4     | 11.1     |

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0117001 **Received** : 22 Feb 2024  
**Lab Number** : 06096766 **Tested** : 23 Feb 2024  
**Unique Number** : 10889619 **Diagnosed** : 23 Feb 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  
 T:  
 F: (201)528-7053

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)