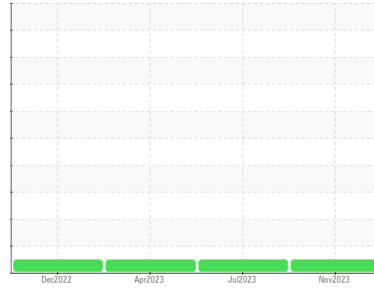


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**(89911X) Walgreens - Tractor**  
Machine Id  
**[Walgreens - Tractor] 136A69058**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 10W30 (11 GAL)**

## 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>PCA0103764</b>  | PCA0100197  | PCA0094680  |
| Sample Date   | Client Info |             | <b>06 Nov 2023</b> | 31 Jul 2023 | 12 Apr 2023 |
| Machine Age   | mls         | Client Info | <b>624330</b>      | 594631      | 564707      |
| Oil Age       | mls         | Client Info | <b>59623</b>       | 29924       | 56981       |
| Oil Changed   | Client Info |             | <b>Changed</b>     | Not Changd  | 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 >80  | <b>17</b>    | 10       | 20       |
| Chromium | ppm    | ASTM D5185m >5   | <b>1</b>     | 1        | 2        |
| Nickel   | ppm    | ASTM D5185m >2   | <b>0</b>     | <1       | <1       |
| Titanium | ppm    | ASTM D5185m      | <b>&lt;1</b> | <1       | <1       |
| Silver   | ppm    | ASTM D5185m >3   | <b>0</b>     | 0        | 0        |
| Aluminum | ppm    | ASTM D5185m >30  | <b>7</b>     | 5        | 9        |
| Lead     | ppm    | ASTM D5185m >30  | <b>0</b>     | 0        | 0        |
| Copper   | ppm    | ASTM D5185m >150 | <b>5</b>     | 4        | 5        |
| Tin      | ppm    | ASTM D5185m >5   | <b>&lt;1</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>4</b>     | <1       | 0        |
| Barium     | ppm    | ASTM D5185m 0    | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm    | ASTM D5185m 50   | <b>64</b>    | 63       | 60       |
| Manganese  | ppm    | ASTM D5185m 0    | <b>&lt;1</b> | <1       | <1       |
| Magnesium  | ppm    | ASTM D5185m 950  | <b>1012</b>  | 1006     | 932      |
| Calcium    | ppm    | ASTM D5185m 1050 | <b>1164</b>  | 1144     | 1056     |
| Phosphorus | ppm    | ASTM D5185m 995  | <b>1084</b>  | 1046     | 945      |
| Zinc       | ppm    | ASTM D5185m 1180 | <b>1325</b>  | 1298     | 1192     |
| Sulfur     | ppm    | ASTM D5185m 2600 | <b>2498</b>  | 3355     | 2459     |

## CONTAMINANTS

|           | method | limit/base      | current   | history1 | history2 |
|-----------|--------|-----------------|-----------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >20 | <b>5</b>  | 3        | 4        |
| Sodium    | ppm    | ASTM D5185m     | <b>11</b> | <1       | <1       |
| Potassium | ppm    | ASTM D5185m >20 | <b>24</b> | 2        | 2        |

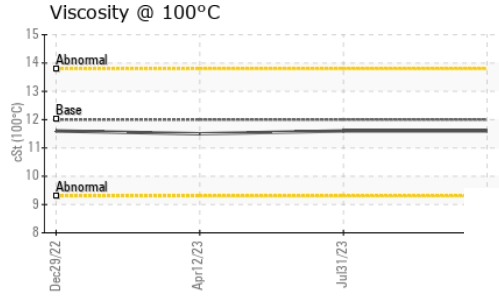
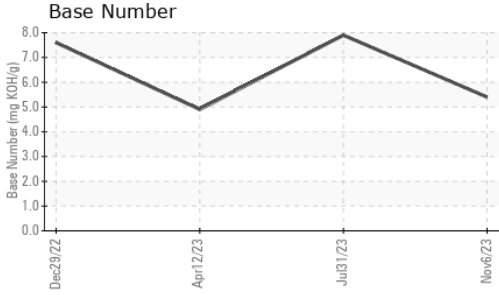
## INFRA-RED

|           | method   | limit/base      | current     | history1 | history2 |
|-----------|----------|-----------------|-------------|----------|----------|
| Soot %    | %        | *ASTM D7844 >3  | <b>0.8</b>  | 0.5      | 0.8      |
| Nitration | Abs/cm   | *ASTM D7624 >20 | <b>9.4</b>  | 7.9      | 8.8      |
| Sulfation | Abs/.1mm | *ASTM D7415 >30 | <b>23.0</b> | 19.4     | 20.3     |

## FLUID DEGRADATION

|                  | method   | limit/base      | current     | history1 | history2 |
|------------------|----------|-----------------|-------------|----------|----------|
| Oxidation        | Abs/.1mm | *ASTM D7414 >25 | <b>19.5</b> | 15.6     | 17.7     |
| Base Number (BN) | mg KOH/g | ASTM D2896      | <b>5.4</b>  | 7.9      | 4.9      |

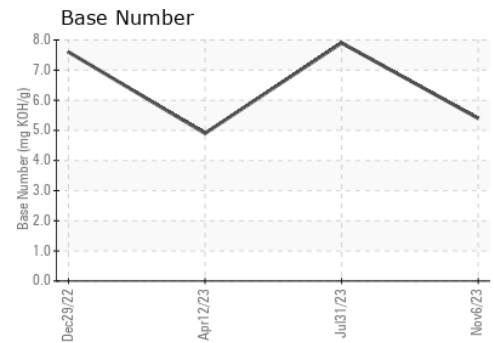
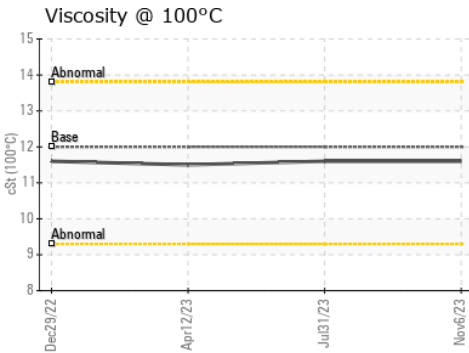
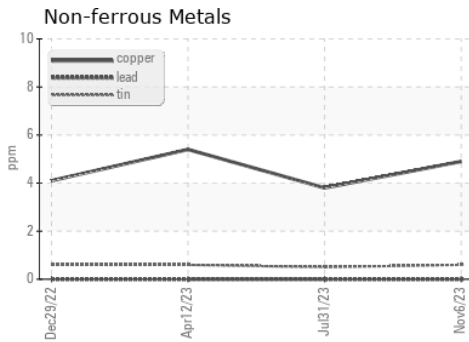
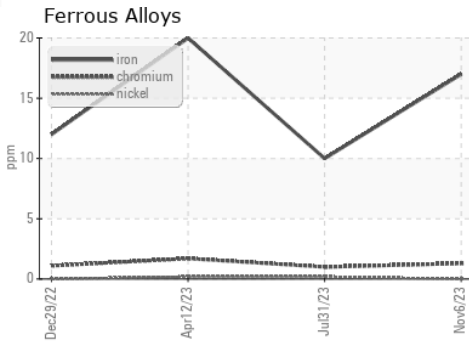
# OIL ANALYSIS REPORT



| 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   | <b>11.6</b> | 11.6     | 11.5 |

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0103764 **Received** : 10 Nov 2023  
**Lab Number** : **06003948** **Diagnosed** : 10 Nov 2023  
**Unique Number** : 10737710 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**Transervice - Shop 1364 - Berkeley-Mt. Vernon**  
 5100 Lake Terrace NE  
 Mt. Vernon, IL  
 US 62864  
 Contact: Erien White  
 ewhite@transervice.com  
 T: (618)244-8726  
 F: (618)244-8791

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)