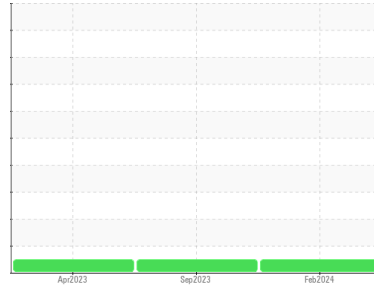


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**(31596ME) Walgreens - Tractor**  
 Machine Id  
**[Walgreens - Tractor] 136D25696**  
 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>PCA0110560</b>  | PCA0093523  | PCA0096552  |
| Sample Date   | Client Info |             | <b>12 Feb 2024</b> | 29 Sep 2023 | 26 Apr 2023 |
| Machine Age   | mls         | Client Info | <b>86059</b>       | 86059       | 80378       |
| Oil Age       | mls         | Client Info | <b>86059</b>       | 5681        | 80378       |
| Oil Changed   | Client Info |             | <b>Changed</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 >110 | <b>18</b>    | 15       | 12       |
| Chromium | ppm    | ASTM D5185m >4   | <b>&lt;1</b> | <1       | 0        |
| Nickel   | ppm    | ASTM D5185m >2   | <b>0</b>     | 0        | 0        |
| Titanium | ppm    | ASTM D5185m      | <b>3</b>     | 21       | 7        |
| Silver   | ppm    | ASTM D5185m >2   | <b>0</b>     | 0        | 0        |
| Aluminum | ppm    | ASTM D5185m >25  | <b>1</b>     | 2        | <1       |
| Lead     | ppm    | ASTM D5185m >45  | <b>0</b>     | 0        | 0        |
| Copper   | ppm    | ASTM D5185m >85  | <b>&lt;1</b> | <1       | <1       |
| Tin      | ppm    | ASTM D5185m >4   | <b>0</b>     | <1       | 0        |
| Vanadium | ppm    | ASTM D5185m      | <b>0</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>19</b>   | 35       | 21       |
| Barium     | ppm    | ASTM D5185m 0    | <b>3</b>    | 0        | 0        |
| Molybdenum | ppm    | ASTM D5185m 50   | <b>55</b>   | 39       | 47       |
| Manganese  | ppm    | ASTM D5185m 0    | <b>0</b>    | <1       | 0        |
| Magnesium  | ppm    | ASTM D5185m 950  | <b>814</b>  | 704      | 767      |
| Calcium    | ppm    | ASTM D5185m 1050 | <b>1071</b> | 1244     | 1338     |
| Phosphorus | ppm    | ASTM D5185m 995  | <b>978</b>  | 841      | 989      |
| Zinc       | ppm    | ASTM D5185m 1180 | <b>1106</b> | 1123     | 1202     |
| Sulfur     | ppm    | ASTM D5185m 2600 | <b>3252</b> | 3042     | 3689     |

## CONTAMINANTS

|           | method | limit/base      | current  | history1 | history2 |
|-----------|--------|-----------------|----------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >30 | <b>3</b> | 4        | 4        |
| Sodium    | ppm    | ASTM D5185m     | <b>0</b> | 1        | 2        |
| Potassium | ppm    | ASTM D5185m >20 | <b>2</b> | 1        | 1        |

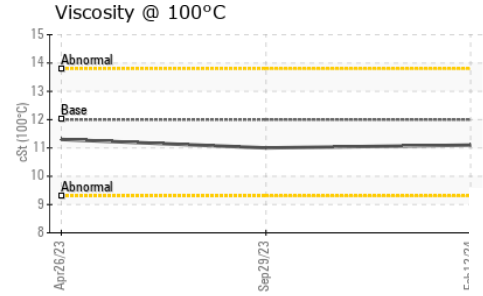
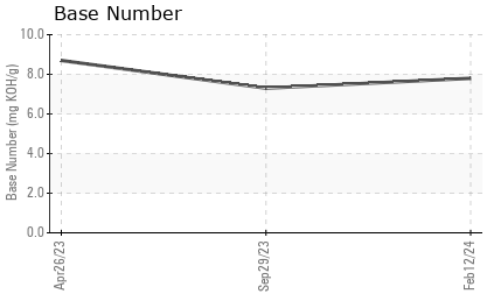
## INFRA-RED

|           | method   | limit/base      | current     | history1 | history2 |
|-----------|----------|-----------------|-------------|----------|----------|
| Soot %    | %        | *ASTM D7844 >3  | <b>0.3</b>  | 0.4      | 0.2      |
| Nitration | Abs/cm   | *ASTM D7624 >20 | <b>7.2</b>  | 8.0      | 7.2      |
| Sulfation | Abs/.1mm | *ASTM D7415 >30 | <b>18.0</b> | 18.4     | 17.2     |

## FLUID DEGRADATION

|                  | method   | limit/base      | current     | history1 | history2 |
|------------------|----------|-----------------|-------------|----------|----------|
| Oxidation        | Abs/.1mm | *ASTM D7414 >25 | <b>13.2</b> | 13.5     | 12.6     |
| Base Number (BN) | mg KOH/g | ASTM D2896      | <b>7.8</b>  | 7.3      | 8.7      |

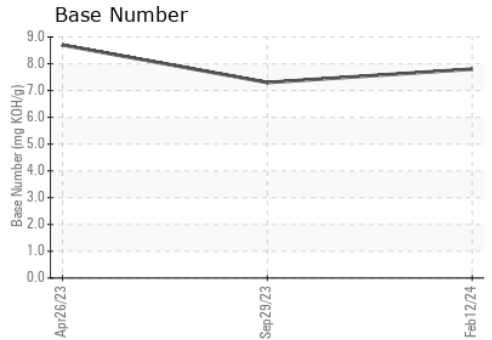
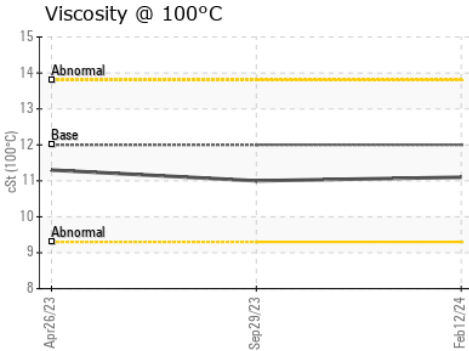
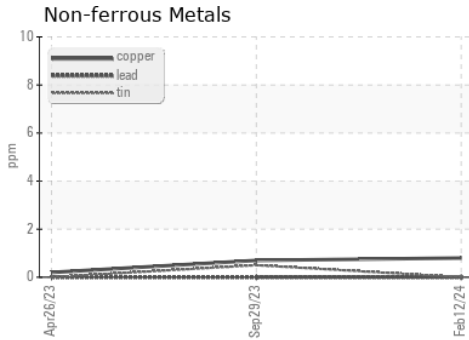
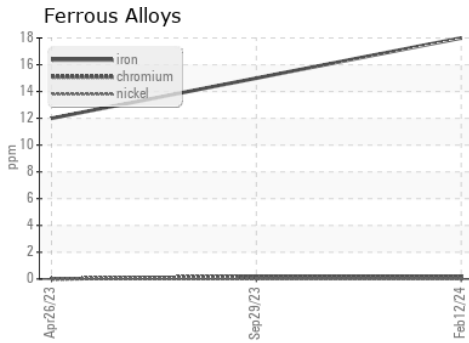
# OIL ANALYSIS REPORT



| 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>11.1</b> | 11.0     | 11.3 |

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0110560  
**Lab Number** : **06094047**  
**Unique Number** : 10886900  
**Test Package** : FLEET

**Received** : 20 Feb 2024  
**Tested** : 21 Feb 2024  
**Diagnosed** : 21 Feb 2024 - Wes Davis

**Transervice - Shop 1376 - Berkeley-Linden**  
 3425 Tremley Point Road  
 Linden, NJ  
 US 07036

Contact: Shop 1376 Oil Analysis  
 shop1376@transervice.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:  
F: