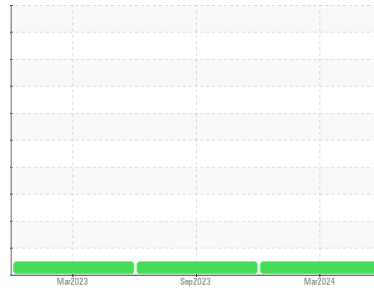


# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Area  
**(16067Z) Walgreens - Tractor**  
 Machine Id  
**[Walgreens - Tractor] 136A61358**  
 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>PCA0119364</b>  | PCA0107365  | PCA0092820  |
| Sample Date   | Client Info |             | <b>27 Mar 2024</b> | 25 Sep 2023 | 16 Mar 2023 |
| Machine Age   | mls         | Client Info | <b>385690</b>      | 333357      | 281563      |
| Oil Age       | mls         | Client Info | <b>51000</b>       | 50000       | 50000       |
| 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 | >80     | <b>32</b>    | 26       | 27 |
| Chromium | ppm    | ASTM D5185m | >5      | <b>3</b>     | 1        | 2  |
| Nickel   | ppm    | ASTM D5185m | >2      | <b>&lt;1</b> | 0        | 0  |
| Titanium | ppm    | ASTM D5185m |         | <b>&lt;1</b> | 0        | 0  |
| Silver   | ppm    | ASTM D5185m | >3      | <b>&lt;1</b> | 0        | 0  |
| Aluminum | ppm    | ASTM D5185m | >30     | <b>17</b>    | 11       | 13 |
| Lead     | ppm    | ASTM D5185m | >30     | <b>&lt;1</b> | 0        | 0  |
| Copper   | ppm    | ASTM D5185m | >150    | <b>9</b>     | 5        | 4  |
| Tin      | ppm    | ASTM D5185m | >5      | <b>1</b>     | <1       | 0  |
| Vanadium | ppm    | ASTM D5185m |         | <b>&lt;1</b> | 0        | 0  |
| Cadmium  | ppm    | ASTM D5185m |         | <b>&lt;1</b> | 0        | 0  |

### ADDITIVES

|            | method | limit/base  | current | history1    | history2 |      |
|------------|--------|-------------|---------|-------------|----------|------|
| Boron      | ppm    | ASTM D5185m | 2       | <b>3</b>    | 4        | 3    |
| Barium     | ppm    | ASTM D5185m | 0       | <b>0</b>    | 0        | 0    |
| Molybdenum | ppm    | ASTM D5185m | 50      | <b>65</b>   | 61       | 64   |
| Manganese  | ppm    | ASTM D5185m | 0       | <b>2</b>    | <1       | <1   |
| Magnesium  | ppm    | ASTM D5185m | 950     | <b>962</b>  | 920      | 1036 |
| Calcium    | ppm    | ASTM D5185m | 1050    | <b>1185</b> | 1101     | 1300 |
| Phosphorus | ppm    | ASTM D5185m | 995     | <b>1126</b> | 1045     | 1079 |
| Zinc       | ppm    | ASTM D5185m | 1180    | <b>1299</b> | 1283     | 1445 |
| Sulfur     | ppm    | ASTM D5185m | 2600    | <b>2818</b> | 2583     | 3440 |

### CONTAMINANTS

|           | method | limit/base  | current | history1  | history2 |   |
|-----------|--------|-------------|---------|-----------|----------|---|
| Silicon   | ppm    | ASTM D5185m | >20     | <b>8</b>  | 4        | 4 |
| Sodium    | ppm    | ASTM D5185m |         | <b>2</b>  | 2        | 2 |
| Potassium | ppm    | ASTM D5185m | >20     | <b>13</b> | 7        | 8 |

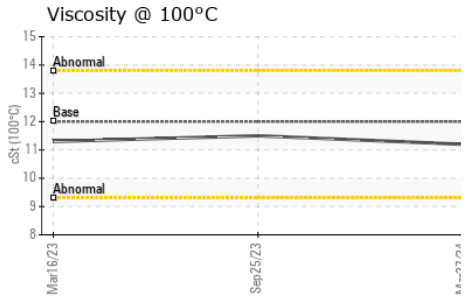
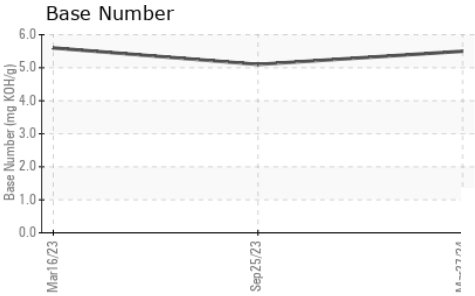
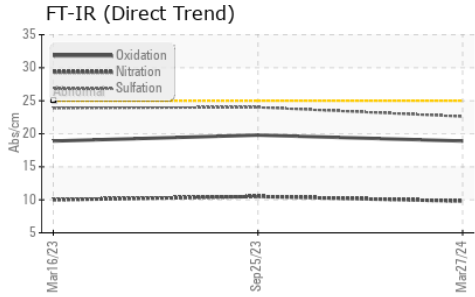
### INFRA-RED

|           | method   | limit/base  | current | history1    | history2 |      |
|-----------|----------|-------------|---------|-------------|----------|------|
| Soot %    | %        | *ASTM D7844 | >3      | <b>1.2</b>  | 1.2      | 1.1  |
| Nitration | Abs/cm   | *ASTM D7624 | >20     | <b>9.8</b>  | 10.5     | 10.0 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30     | <b>22.6</b> | 24.0     | 23.9 |

### FLUID DEGRADATION

|                  | method   | limit/base  | current | history1    | history2 |      |
|------------------|----------|-------------|---------|-------------|----------|------|
| Oxidation        | Abs/.1mm | *ASTM D7414 | >25     | <b>18.9</b> | 19.8     | 18.9 |
| Base Number (BN) | mg KOH/g | ASTM D2896  |         | <b>5.5</b>  | 5.1      | 5.6  |

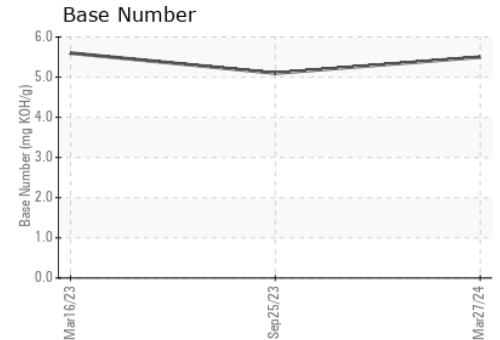
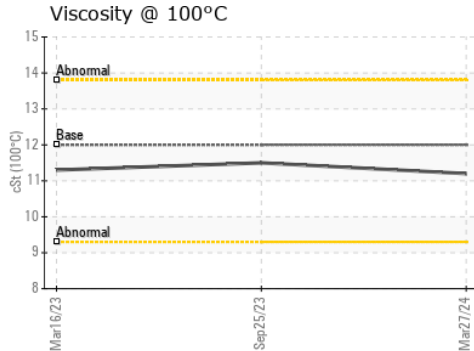
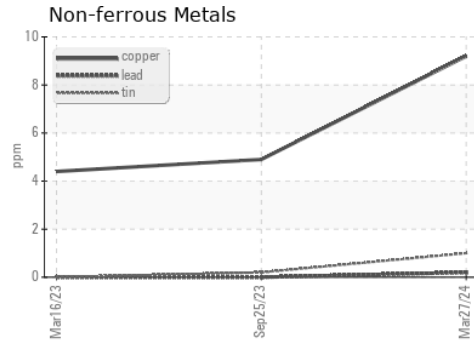
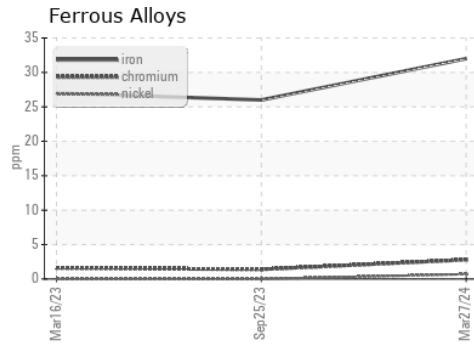
# OIL ANALYSIS REPORT



| 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   | 11.2     | 11.5     |

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0119364  
**Lab Number** : 06140586  
**Unique Number** : 10965394  
**Test Package** : FLEET

**Received** : 05 Apr 2024  
**Tested** : 08 Apr 2024  
**Diagnosed** : 08 Apr 2024 - Wes Davis

**Transervice - Shop 1370 - Berkeley-Perrysburg**  
 28727 Oregon Road  
 Perrysburg, OH  
 US 43551

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)

Contact: Curtis Hart  
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 F: (419)666-3279