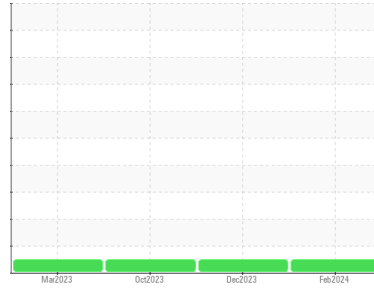


# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Area  
**Walgreens - Tractor**  
 Machine for  
**[Walgreens - Tractor] 136A63424**  
 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>PCA0117909</b>  | PCA0105466  | PCA0105434  |
| Sample Date   | Client Info |             | <b>08 Feb 2024</b> | 06 Dec 2023 | 16 Oct 2023 |
| Machine Age   | mls         | Client Info | <b>191867</b>      | 158709      | 135092      |
| Oil Age       | mls         | Client Info | <b>29000</b>       | 50000       | 50000       |
| 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 >80  | <b>14</b>    | 11       | 10       |
| Chromium | ppm    | ASTM D5185m >5   | <b>2</b>     | 2        | 1        |
| Nickel   | ppm    | ASTM D5185m >2   | <b>&lt;1</b> | 0        | <1       |
| Titanium | ppm    | ASTM D5185m      | <b>&lt;1</b> | 0        | <1       |
| Silver   | ppm    | ASTM D5185m >3   | <b>&lt;1</b> | 0        | <1       |
| Aluminum | ppm    | ASTM D5185m >30  | <b>9</b>     | 7        | 8        |
| Lead     | ppm    | ASTM D5185m >30  | <b>&lt;1</b> | 0        | 0        |
| Copper   | ppm    | ASTM D5185m >150 | <b>4</b>     | 3        | 6        |
| Tin      | ppm    | ASTM D5185m >5   | <b>&lt;1</b> | <1       | 0        |
| Vanadium | ppm    | ASTM D5185m      | <b>&lt;1</b> | <1       | <1       |
| Cadmium  | ppm    | ASTM D5185m      | <b>&lt;1</b> | <1       | 0        |

### ADDITIVES

|            | method | limit/base       | current      | history1 | history2 |
|------------|--------|------------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185m 2    | <b>4</b>     | 8        | 6        |
| Barium     | ppm    | ASTM D5185m 0    | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm    | ASTM D5185m 50   | <b>61</b>    | 61       | 62       |
| Manganese  | ppm    | ASTM D5185m 0    | <b>&lt;1</b> | <1       | 0        |
| Magnesium  | ppm    | ASTM D5185m 950  | <b>956</b>   | 996      | 921      |
| Calcium    | ppm    | ASTM D5185m 1050 | <b>1082</b>  | 1079     | 1085     |
| Phosphorus | ppm    | ASTM D5185m 995  | <b>977</b>   | 1097     | 972      |
| Zinc       | ppm    | ASTM D5185m 1180 | <b>1236</b>  | 1322     | 1244     |
| Sulfur     | ppm    | ASTM D5185m 2600 | <b>3405</b>  | 3172     | 3098     |

### CONTAMINANTS

|           | method | limit/base      | current   | history1 | history2 |
|-----------|--------|-----------------|-----------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >20 | <b>6</b>  | 4        | 3        |
| Sodium    | ppm    | ASTM D5185m     | <b>0</b>  | 2        | 0        |
| Potassium | ppm    | ASTM D5185m >20 | <b>22</b> | 15       | 18       |

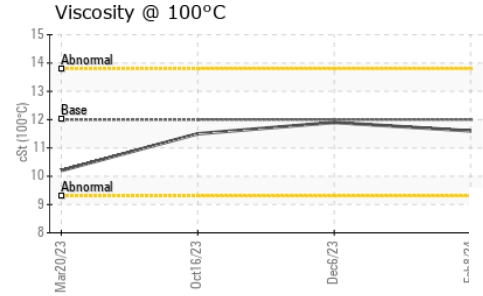
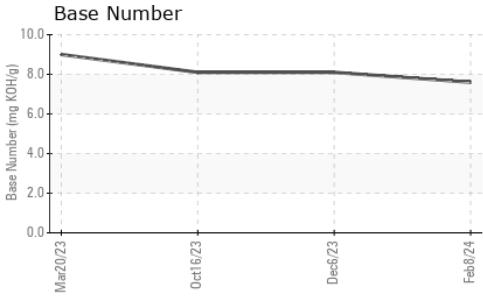
### INFRA-RED

|           | method   | limit/base      | current     | history1 | history2 |
|-----------|----------|-----------------|-------------|----------|----------|
| Soot %    | %        | *ASTM D7844 >3  | <b>0.4</b>  | 0.3      | 0.3      |
| Nitration | Abs/cm   | *ASTM D7624 >20 | <b>7.8</b>  | 7.2      | 7.5      |
| Sulfation | Abs/.1mm | *ASTM D7415 >30 | <b>19.4</b> | 18.8     | 19.3     |

### FLUID DEGRADATION

|                  | method   | limit/base      | current     | history1 | history2 |
|------------------|----------|-----------------|-------------|----------|----------|
| Oxidation        | Abs/.1mm | *ASTM D7414 >25 | <b>15.4</b> | 14.9     | 15.4     |
| Base Number (BN) | mg KOH/g | ASTM D2896      | <b>7.6</b>  | 8.1      | 8.1      |

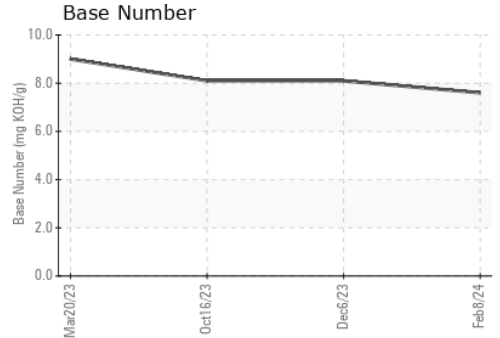
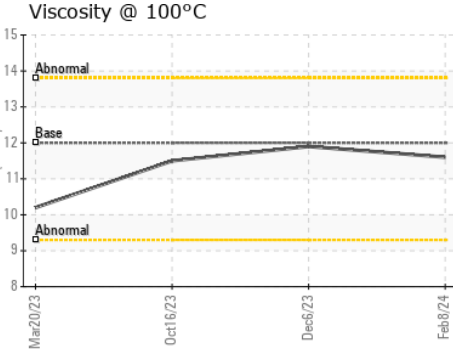
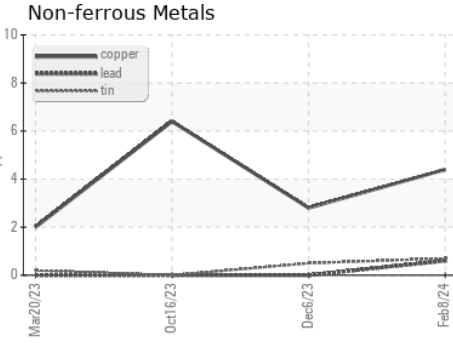
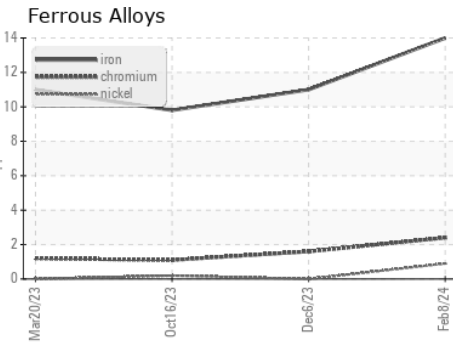
# OIL ANALYSIS REPORT



| 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> | 11.9     | 11.5 |

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0117909  
**Lab Number** : 06092257  
**Unique Number** : 10885110  
**Test Package** : FLEET

**Transervice - Shop 1366 - Berkeley-Woodland**  
 2370 East Main Street  
 Woodland, CA  
 US 95776  
 Contact: Gary Mann  
 gmanna@transervice.com  
 T: (530)666-7771  
 F: (530)406-7971

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)