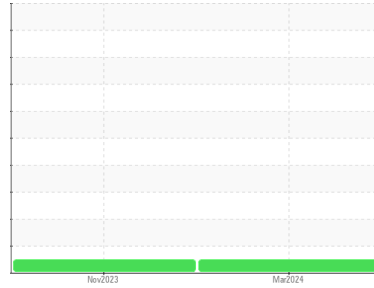


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**(P926533) Preferred Service-Tractor**  
 Machine Id  
**[Preferred Service-Tractor] 192A01994**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (36 QTS)**

## 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>PCA0116679</b>  | PCA0109426  | ---      |
| Sample Date   | Client Info |             | <b>12 Mar 2024</b> | 13 Nov 2023 | ---      |
| Machine Age   | mls         | Client Info | <b>526893</b>      | 514325      | ---      |
| Oil Age       | mls         | Client Info | <b>16279</b>       | 15253       | ---      |
| Oil Changed   | Client Info |             | <b>Changed</b>     | Changed     | ---      |
| Sample Status |             |             | <b>NORMAL</b>      | NORMAL      | ---      |

## CONTAMINATION

|        | method    | limit/base | current        | history1 | history2 |
|--------|-----------|------------|----------------|----------|----------|
| Fuel   | WC Method | >6.0       | <b>&lt;1.0</b> | <1.0     | ---      |
| Water  | WC Method | >0.2       | <b>NEG</b>     | NEG      | ---      |
| Glycol | WC Method |            | <b>NEG</b>     | NEG      | ---      |

## WEAR METALS

|          | method | limit/base       | current      | history1 | history2 |
|----------|--------|------------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >100 | <b>23</b>    | 24       | ---      |
| Chromium | ppm    | ASTM D5185m >20  | <b>&lt;1</b> | <1       | ---      |
| Nickel   | ppm    | ASTM D5185m >2   | <b>&lt;1</b> | <1       | ---      |
| Titanium | ppm    | ASTM D5185m      | <b>&lt;1</b> | <1       | ---      |
| Silver   | ppm    | ASTM D5185m >2   | <b>0</b>     | 0        | ---      |
| Aluminum | ppm    | ASTM D5185m >25  | <b>4</b>     | 4        | ---      |
| Lead     | ppm    | ASTM D5185m >40  | <b>&lt;1</b> | 1        | ---      |
| Copper   | ppm    | ASTM D5185m >330 | <b>6</b>     | 1        | ---      |
| Tin      | ppm    | ASTM D5185m >15  | <b>1</b>     | 1        | ---      |
| Vanadium | ppm    | ASTM D5185m      | <b>0</b>     | 0        | ---      |
| Cadmium  | ppm    | ASTM D5185m      | <b>0</b>     | 0        | ---      |

## ADDITIVES

|            | method | limit/base       | current      | history1 | history2 |
|------------|--------|------------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185m 2    | <b>0</b>     | 2        | ---      |
| Barium     | ppm    | ASTM D5185m 0    | <b>0</b>     | 0        | ---      |
| Molybdenum | ppm    | ASTM D5185m 50   | <b>62</b>    | 59       | ---      |
| Manganese  | ppm    | ASTM D5185m 0    | <b>&lt;1</b> | <1       | ---      |
| Magnesium  | ppm    | ASTM D5185m 950  | <b>979</b>   | 913      | ---      |
| Calcium    | ppm    | ASTM D5185m 1050 | <b>1117</b>  | 1023     | ---      |
| Phosphorus | ppm    | ASTM D5185m 995  | <b>1111</b>  | 1042     | ---      |
| Zinc       | ppm    | ASTM D5185m 1180 | <b>1304</b>  | 1247     | ---      |
| Sulfur     | ppm    | ASTM D5185m 2600 | <b>3066</b>  | 3061     | ---      |

## CONTAMINANTS

|           | method | limit/base      | current  | history1 | history2 |
|-----------|--------|-----------------|----------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >25 | <b>4</b> | 3        | ---      |
| Sodium    | ppm    | ASTM D5185m     | <b>1</b> | 7        | ---      |
| Potassium | ppm    | ASTM D5185m >20 | <b>3</b> | 1        | ---      |

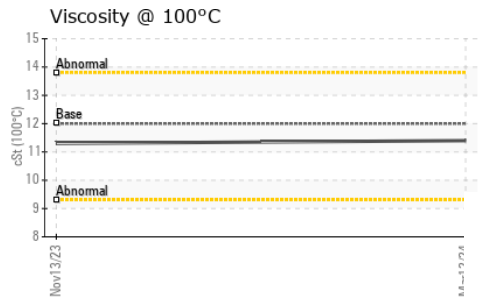
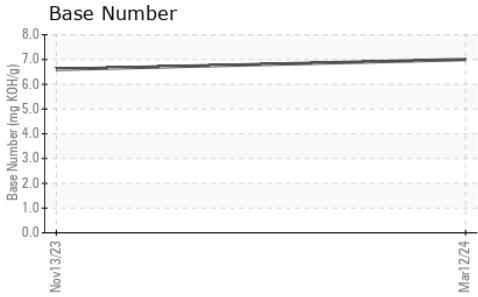
## INFRA-RED

|           | method   | limit/base      | current     | history1 | history2 |
|-----------|----------|-----------------|-------------|----------|----------|
| Soot %    | %        | *ASTM D7844 >3  | <b>0.9</b>  | 1.6      | ---      |
| Nitration | Abs/cm   | *ASTM D7624 >20 | <b>9.4</b>  | 9.5      | ---      |
| Sulfation | Abs/.1mm | *ASTM D7415 >30 | <b>20.8</b> | 22.7     | ---      |

## FLUID DEGRADATION

|                  | method   | limit/base      | current     | history1 | history2 |
|------------------|----------|-----------------|-------------|----------|----------|
| Oxidation        | Abs/.1mm | *ASTM D7414 >25 | <b>16.4</b> | 16.8     | ---      |
| Base Number (BN) | mg KOH/g | ASTM D2896      | <b>7.0</b>  | 6.6      | ---      |

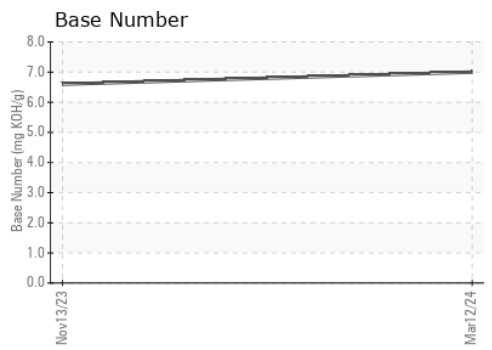
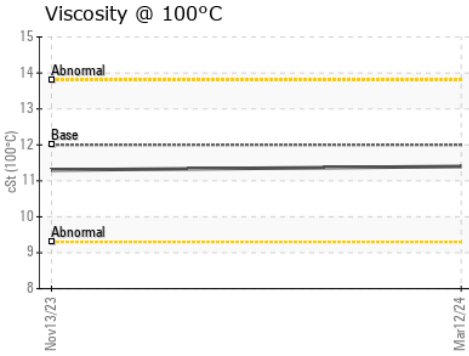
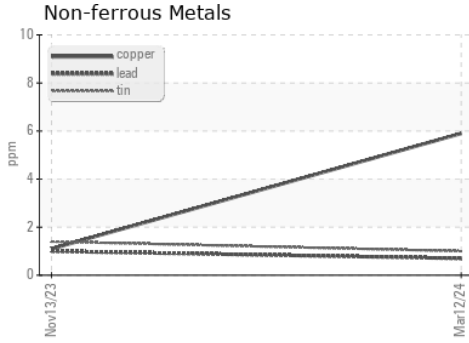
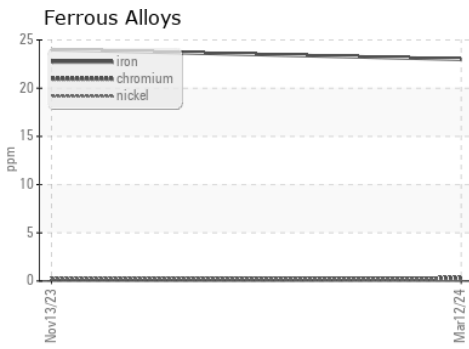
# OIL ANALYSIS REPORT



| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | ---      |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | ---      |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | ---      |
| Silt             | scalar | *Visual    | NONE    | NONE     | ---      |
| Debris           | scalar | *Visual    | NONE    | NONE     | ---      |
| Sand/Dirt        | scalar | *Visual    | NONE    | NONE     | ---      |
| Appearance       | scalar | *Visual    | NORML   | NORML    | ---      |
| Odor             | scalar | *Visual    | NORML   | NORML    | ---      |
| Emulsified Water | scalar | *Visual    | >0.2    | NEG      | ---      |
| Free Water       | scalar | *Visual    |         | NEG      | ---      |

| FLUID PROPERTIES | method | limit/base | current | history1    | history2 |     |
|------------------|--------|------------|---------|-------------|----------|-----|
| Visc @ 100°C     | cSt    | ASTM D445  | 12.00   | <b>11.4</b> | 11.3     | --- |

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0116679  
**Lab Number** : **06126123**  
**Unique Number** : 10940274  
**Test Package** : FLEET

**Received** : 22 Mar 2024  
**Tested** : 22 Mar 2024  
**Diagnosed** : 22 Mar 2024 - Wes Davis

**Transervice - Shop 1920 - Preferred Service**  
 1955 W. North Avenue, Bldg K  
 Melrose Park, IL  
 US 60160  
 Contact: Tom Lindeman  
 tlindemann@transervice.com  
 T: (630)376-8946  
 F:

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)