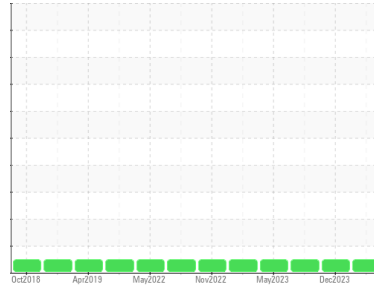


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**26641**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON UHP 5W30 (--- 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>PCA0115449</b>  | PCA0103361   | PCA0106128  |
| Sample Date   | Client Info | <b>26 Dec 2023</b> | 10 Dec 2023  | 16 Oct 2023 |
| Machine Age   | mls         | Client Info        | 0            | 401953      |
| Oil Age       | mls         | Client Info        | <b>20000</b> | 0           |
| Oil Changed   | Client Info | <b>Not Changed</b> | N/A          | Changed     |
| Sample Status |             | <b>NORMAL</b>      | NORMAL       | NORMAL      |

## CONTAMINATION

| method | limit/base     | current        | history1 | history2 |
|--------|----------------|----------------|----------|----------|
| Fuel   | WC Method >6.0 | <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 >100 | <b>9</b>     | 7        | 18       |
| Chromium | ppm ASTM D5185m >20  | <b>&lt;1</b> | <1       | <1       |
| Nickel   | ppm ASTM D5185m >2   | <b>&lt;1</b> | <1       | <1       |
| Titanium | ppm ASTM D5185m      | <b>&lt;1</b> | <1       | <1       |
| Silver   | ppm ASTM D5185m >2   | <b>&lt;1</b> | 0        | <1       |
| Aluminum | ppm ASTM D5185m >25  | <b>2</b>     | 2        | 2        |
| Lead     | ppm ASTM D5185m >40  | <b>2</b>     | 1        | 3        |
| Copper   | ppm ASTM D5185m >330 | <b>4</b>     | 2        | 4        |
| Tin      | ppm ASTM D5185m >15  | <b>1</b>     | <1       | 1        |
| Vanadium | ppm ASTM D5185m      | <b>&lt;1</b> | 0        | 0        |
| Cadmium  | ppm ASTM D5185m      | <b>&lt;1</b> | <1       | <1       |

## ADDITIVES

| method     | limit/base           | current      | history1 | history2 |
|------------|----------------------|--------------|----------|----------|
| Boron      | ppm ASTM D5185m 0    | <b>4</b>     | 0        | 0        |
| Barium     | ppm ASTM D5185m 0    | <b>0</b>     | 0        | 12       |
| Molybdenum | ppm ASTM D5185m 64   | <b>51</b>    | 56       | 62       |
| Manganese  | ppm ASTM D5185m 0    | <b>&lt;1</b> | <1       | <1       |
| Magnesium  | ppm ASTM D5185m 1160 | <b>834</b>   | 890      | 964      |
| Calcium    | ppm ASTM D5185m 820  | <b>1002</b>  | 1036     | 1089     |
| Phosphorus | ppm ASTM D5185m 1160 | <b>937</b>   | 979      | 1033     |
| Zinc       | ppm ASTM D5185m 1260 | <b>1060</b>  | 1205     | 1266     |
| Sulfur     | ppm ASTM D5185m 3000 | <b>3130</b>  | 3501     | 2919     |

## CONTAMINANTS

| method    | limit/base          | current  | history1 | history2 |
|-----------|---------------------|----------|----------|----------|
| Silicon   | ppm ASTM D5185m >25 | <b>3</b> | 4        | 5        |
| Sodium    | ppm ASTM D5185m     | <b>8</b> | 6        | 13       |
| Potassium | ppm ASTM D5185m >20 | <b>3</b> | 2        | 4        |

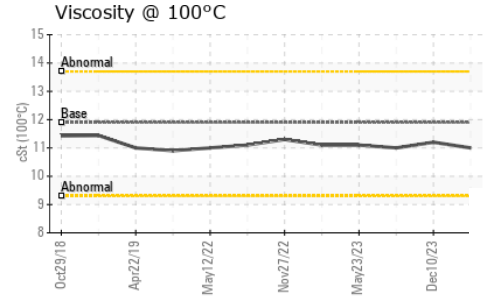
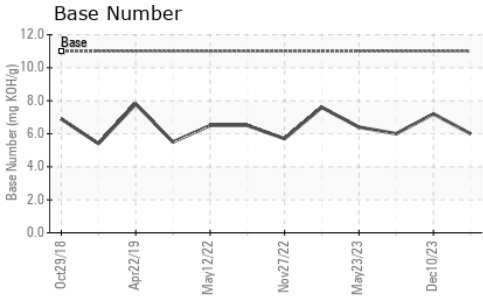
## INFRA-RED

| method    | limit/base               | current     | history1 | history2 |
|-----------|--------------------------|-------------|----------|----------|
| Soot %    | % *ASTM D7844 >3         | <b>0.3</b>  | 0.3      | 0.5      |
| Nitration | Abs/cm *ASTM D7624 >20   | <b>8.4</b>  | 7.3      | 9.5      |
| Sulfation | Abs/.1mm *ASTM D7415 >30 | <b>18.7</b> | 18.6     | 21.7     |

## FLUID DEGRADATION

| method           | limit/base               | current     | history1 | history2 |
|------------------|--------------------------|-------------|----------|----------|
| Oxidation        | Abs/.1mm *ASTM D7414 >25 | <b>15.5</b> | 15.0     | 18.3     |
| Base Number (BN) | mg KOH/g ASTM D2896 11.0 | <b>6.0</b>  | 7.2      | 6.0      |

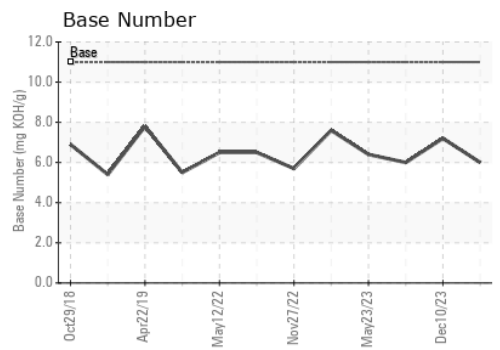
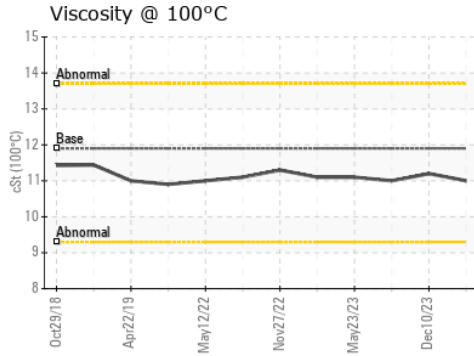
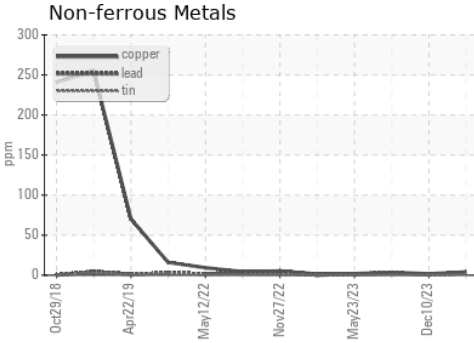
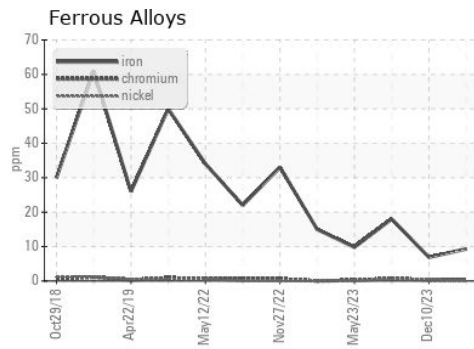
# OIL ANALYSIS REPORT



| 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  | 11.9    | <b>11.0</b> | 11.2     | 11.0 |

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0115449      **Received** : 14 Mar 2024  
**Lab Number** : **06118065**      **Tested** : 15 Mar 2024  
**Unique Number** : 10926898      **Diagnosed** : 15 Mar 2024 - Wes Davis  
**Test Package** : FLEET

**PERDUE FARMS - GEORGETOWN**  
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 T:  
 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)