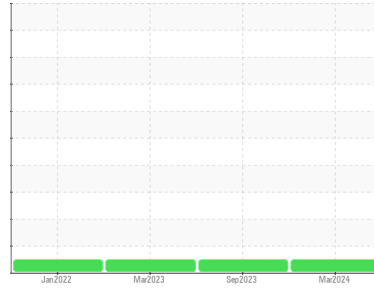


# OIL ANALYSIS REPORT

Area  
**FLEET**  
 Machine Id  
**1926741**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**

### Sample Rating Trend



## DIAGNOSIS

**Recommendation**  
 Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

**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>PCA0116236</b>  | PCA0104892  | PCA0092235  |
| Sample Date        | Client Info |             |            | <b>18 Mar 2024</b> | 12 Sep 2023 | 22 Mar 2023 |
| Machine Age        | hrs         | Client Info |            | <b>0</b>           | 0           | 0           |
| Oil Age            | hrs         | Client Info |            | <b>0</b>           | 0           | 0           |
| Oil Changed        | Client Info |             |            | <b>N/A</b>         | N/A         | N/A         |
| 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     | 0.7      |
| 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>44</b>  | 40       | 47       |
| Chromium    | ppm | ASTM D5185m | >20        | <b>0</b>   | <1       | <1       |
| Nickel      | ppm | ASTM D5185m | >4         | <b>0</b>   | 0        | 0        |
| Titanium    | ppm | ASTM D5185m |            | <b>0</b>   | 0        | 0        |
| Silver      | ppm | ASTM D5185m | >3         | <b>0</b>   | 0        | 0        |
| Aluminum    | ppm | ASTM D5185m | >20        | <b>2</b>   | 2        | 4        |
| Lead        | ppm | ASTM D5185m | >40        | <b>0</b>   | 3        | 2        |
| Copper      | ppm | ASTM D5185m | >330       | <b>9</b>   | 9        | 13       |
| Tin         | ppm | ASTM D5185m | >15        | <b>0</b>   | 1        | 1        |
| Antimony    | ppm | ASTM D5185m |            | <b>---</b> | ---      | ---      |
| Vanadium    | ppm | ASTM D5185m |            | <b>0</b>   | 0        | 0        |
| Cadmium     | ppm | ASTM D5185m |            | <b>0</b>   | 0        | 0        |

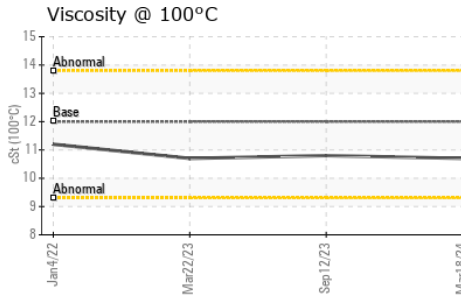
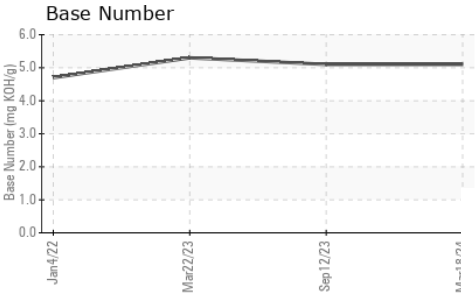
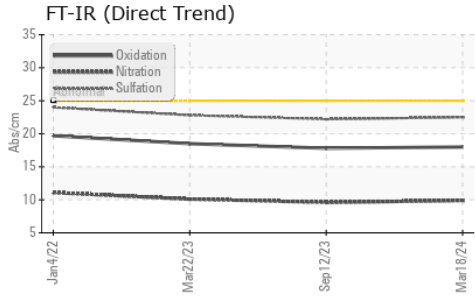
| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m | 2          | <b>&lt;1</b> | 0        | 0        |
| Barium     | ppm | ASTM D5185m | 0          | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm | ASTM D5185m | 50         | <b>63</b>    | 63       | 62       |
| Manganese  | ppm | ASTM D5185m | 0          | <b>0</b>     | <1       | <1       |
| Magnesium  | ppm | ASTM D5185m | 950        | <b>940</b>   | 969      | 882      |
| Calcium    | ppm | ASTM D5185m | 1050       | <b>1182</b>  | 1165     | 1032     |
| Phosphorus | ppm | ASTM D5185m | 995        | <b>990</b>   | 924      | 811      |
| Zinc       | ppm | ASTM D5185m | 1180       | <b>1181</b>  | 1239     | 1158     |
| Sulfur     | ppm | ASTM D5185m | 2600       | <b>3108</b>  | 3008     | 2638     |

| CONTAMINANTS |     | method      | limit/base | current   | history1 | history2 |
|--------------|-----|-------------|------------|-----------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >25        | <b>6</b>  | 6        | 8        |
| Sodium       | ppm | ASTM D5185m |            | <b>12</b> | 14       | 16       |
| Potassium    | ppm | ASTM D5185m | >20        | <b>3</b>  | 8        | 6        |

| INFRA-RED |          | method      | limit/base | current     | history1 | history2 |
|-----------|----------|-------------|------------|-------------|----------|----------|
| Soot %    | %        | *ASTM D7844 | >3         | <b>0.7</b>  | 0.7      | 0.7      |
| Nitration | Abs/cm   | *ASTM D7624 | >20        | <b>9.9</b>  | 9.6      | 10.1     |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30        | <b>22.5</b> | 22.2     | 22.8     |

| FLUID DEGRADATION |          | method      | limit/base | current     | history1 | history2 |
|-------------------|----------|-------------|------------|-------------|----------|----------|
| Oxidation         | Abs/.1mm | *ASTM D7414 | >25        | <b>18.0</b> | 17.8     | 18.5     |
| Base Number (BN)  | mg KOH/g | ASTM D2896  |            | <b>5.1</b>  | 5.1      | 5.3      |

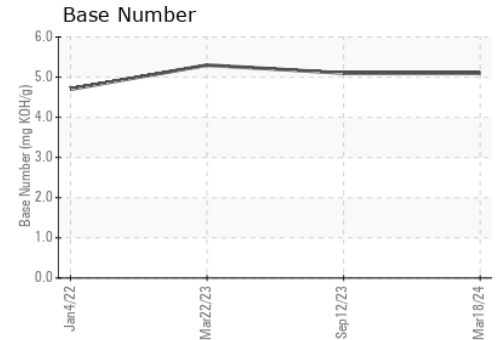
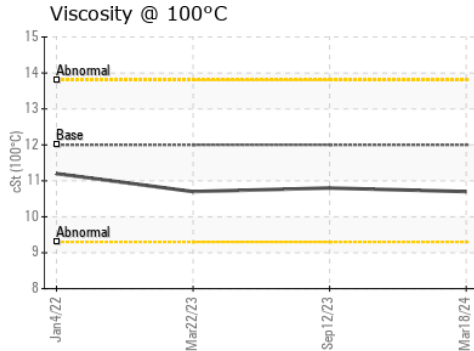
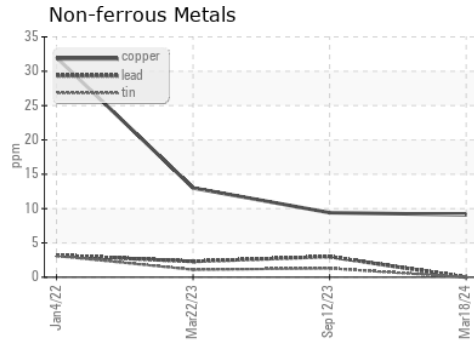
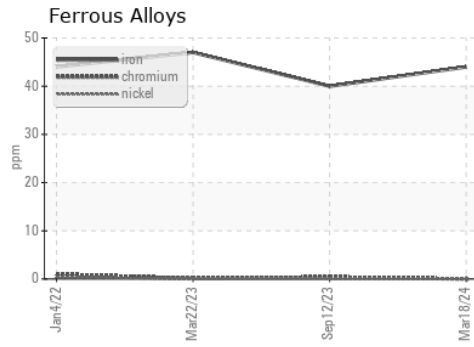
# OIL ANALYSIS REPORT



| 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   | 10.7     | 10.8     |

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0116236      **Received** : 12 Apr 2024  
**Lab Number** : **06147026**      **Tested** : 15 Apr 2024  
**Unique Number** : 10977104      **Diagnosed** : 15 Apr 2024 - Wes Davis  
**Test Package** : FLEET

**PERDUE FARMS - DILLON**  
 2047 HWY 9 WEST  
 DILLON, SC  
 US 29536  
 Contact: KEVIN HOOKS  
 kevin.hooks@perdue.com  
 T: (843)841-8069  
 F: (843)841-8070

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)