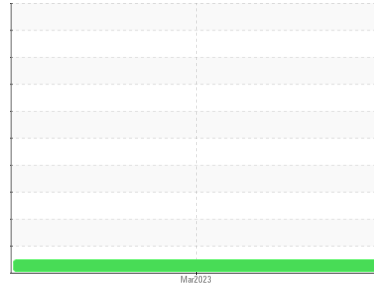


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**


Machine Id  
**706**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON HP 15W40 (--- GAL)**



## 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>PCA0066378</b>  | ---      | ---      |
| Sample Date   | Client Info |             | <b>20 Mar 2023</b> | ---      | ---      |
| Machine Age   | mls         | Client Info | <b>571119</b>      | ---      | ---      |
| Oil Age       | mls         | Client Info | <b>13830</b>       | ---      | ---      |
| Oil Changed   | Client Info |             | <b>Changed</b>     | ---      | ---      |
| Sample Status |             |             | <b>NORMAL</b>      | ---      | ---      |

## CONTAMINATION

|        | method    | limit/base | current        | history1 | history2 |
|--------|-----------|------------|----------------|----------|----------|
| Fuel   | WC Method | >5         | <b>&lt;1.0</b> | ---      | ---      |
| Glycol | WC Method |            | <b>NEG</b>     | ---      | ---      |

## WEAR METALS

|          | method | limit/base       | current      | history1 | history2 |
|----------|--------|------------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >100 | <b>30</b>    | ---      | ---      |
| Chromium | ppm    | ASTM D5185m >20  | <b>&lt;1</b> | ---      | ---      |
| Nickel   | ppm    | ASTM D5185m >4   | <b>&lt;1</b> | ---      | ---      |
| Titanium | ppm    | ASTM D5185m      | <b>0</b>     | ---      | ---      |
| Silver   | ppm    | ASTM D5185m >3   | <b>0</b>     | ---      | ---      |
| Aluminum | ppm    | ASTM D5185m >20  | <b>2</b>     | ---      | ---      |
| Lead     | ppm    | ASTM D5185m >40  | <b>1</b>     | ---      | ---      |
| Copper   | ppm    | ASTM D5185m >330 | <b>1</b>     | ---      | ---      |
| Tin      | ppm    | ASTM D5185m >15  | <b>&lt;1</b> | ---      | ---      |
| Vanadium | ppm    | ASTM D5185m      | <b>0</b>     | ---      | ---      |
| Cadmium  | ppm    | ASTM D5185m      | <b>0</b>     | ---      | ---      |

## ADDITIVES

|            | method | limit/base  | current      | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185m | <b>5</b>     | ---      | ---      |
| Barium     | ppm    | ASTM D5185m | <b>2</b>     | ---      | ---      |
| Molybdenum | ppm    | ASTM D5185m | <b>53</b>    | ---      | ---      |
| Manganese  | ppm    | ASTM D5185m | <b>&lt;1</b> | ---      | ---      |
| Magnesium  | ppm    | ASTM D5185m | <b>867</b>   | ---      | ---      |
| Calcium    | ppm    | ASTM D5185m | <b>1201</b>  | ---      | ---      |
| Phosphorus | ppm    | ASTM D5185m | <b>968</b>   | ---      | ---      |
| Zinc       | ppm    | ASTM D5185m | <b>1179</b>  | ---      | ---      |
| Sulfur     | ppm    | ASTM D5185m | <b>3004</b>  | ---      | ---      |

## CONTAMINANTS

|           | method | limit/base      | current   | history1 | history2 |
|-----------|--------|-----------------|-----------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >25 | <b>13</b> | ---      | ---      |
| Sodium    | ppm    | ASTM D5185m     | <b>7</b>  | ---      | ---      |
| Potassium | ppm    | ASTM D5185m >20 | <b>12</b> | ---      | ---      |

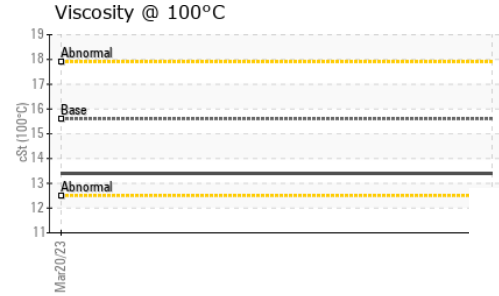
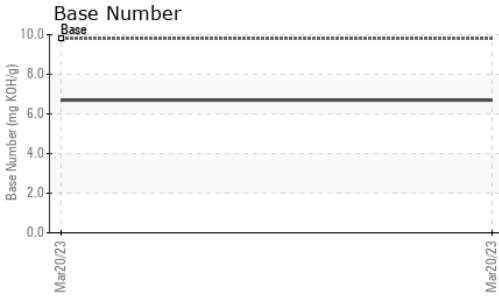
## INFRA-RED

|           | method   | limit/base      | current     | history1 | history2 |
|-----------|----------|-----------------|-------------|----------|----------|
| Soot %    | %        | *ASTM D7844 >3  | <b>0.3</b>  | ---      | ---      |
| Nitration | Abs/cm   | *ASTM D7624 >20 | <b>11.2</b> | ---      | ---      |
| Sulfation | Abs/.1mm | *ASTM D7415 >30 | <b>23.1</b> | ---      | ---      |

## FLUID DEGRADATION

|                  | method   | limit/base      | current     | history1 | history2 |
|------------------|----------|-----------------|-------------|----------|----------|
| Oxidation        | Abs/.1mm | *ASTM D7414 >25 | <b>20.4</b> | ---      | ---      |
| Base Number (BN) | mg KOH/g | ASTM D2896 9.8  | <b>6.7</b>  | ---      | ---      |

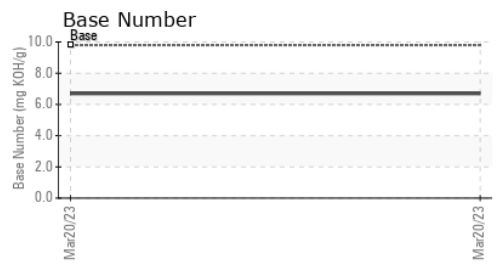
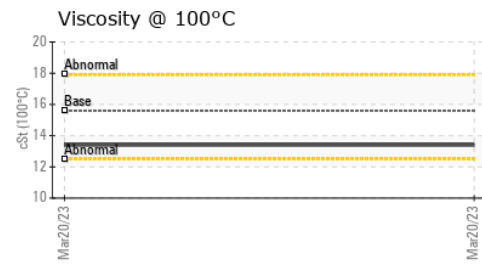
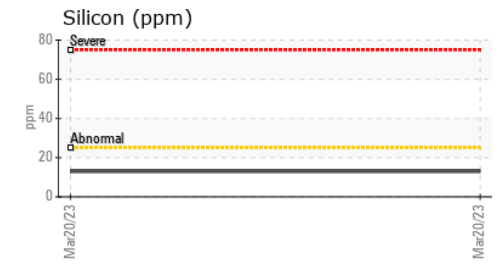
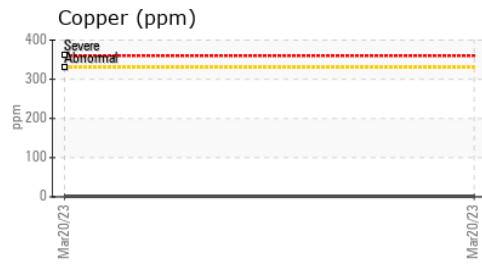
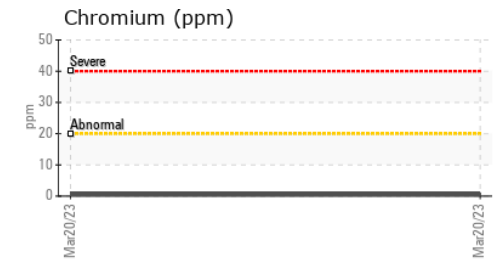
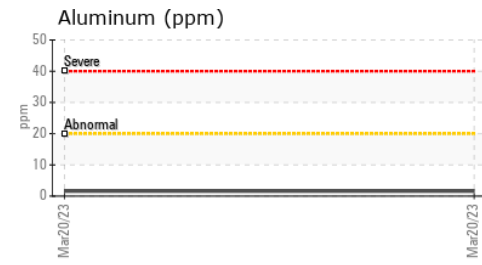
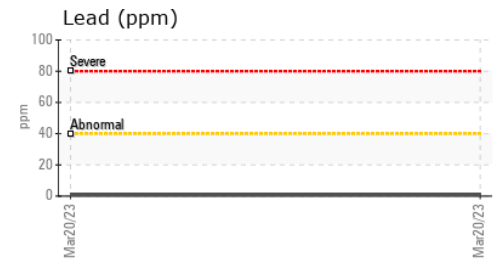
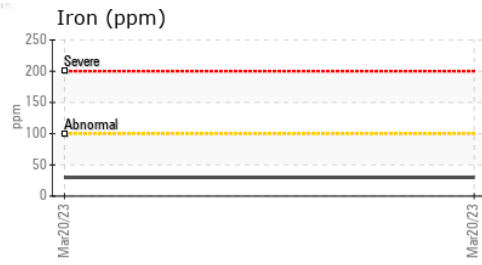
# OIL ANALYSIS REPORT



| 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  | 15.6    | <b>13.4</b> | ---      |

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0066378 **Received** : 03 Apr 2023  
**Lab Number** : **05808505** **Diagnosed** : 04 Apr 2023  
**Unique Number** : 10406034 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**CENTRAL VALLEY AG**  
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 OAKDALE, CA  
 US 95361  
 Contact: S MCHENRY  
 smchenry@cv-ag.com  
 T: (209)630-8094  
 F:

Certificate L2367  
 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)