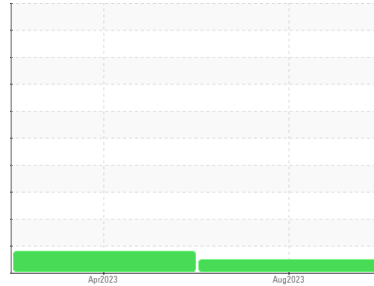


# OIL ANALYSIS REPORT

## Sample Rating Trend

**NORMAL**



Area  
**(40579Z) Walgreens**  
Machine Id  
**[Walgreens] 136A62553**  
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>PCA0093566</b>  | PCA0093645  | ---      |
| Sample Date        | Client Info |             |            | <b>01 Aug 2023</b> | 13 Apr 2023 | ---      |
| Machine Age        | mls         | Client Info |            | <b>181951</b>      | 146530      | ---      |
| Oil Age            | mls         | Client Info |            | <b>35421</b>       | 0           | ---      |
| Oil Changed        | Client Info |             |            | <b>Changed</b>     | Changed     | ---      |
| Sample Status      |             |             |            | <b>NORMAL</b>      | ABNORMAL    | ---      |

| CONTAMINATION |           | method | limit/base | current        | history1 | history2 |
|---------------|-----------|--------|------------|----------------|----------|----------|
| Fuel          | WC Method |        | >2.0       | <b>&lt;1.0</b> | <1.0     | ---      |
| Glycol        | WC Method |        |            | <b>NEG</b>     | NEG      | ---      |

| WEAR METALS |     | method      | limit/base | current      | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185m | >100       | <b>15</b>    | 43       | ---      |
| Chromium    | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | 2        | ---      |
| Nickel      | ppm | ASTM D5185m | >4         | <b>0</b>     | 0        | ---      |
| Titanium    | ppm | ASTM D5185m |            | <b>2</b>     | 3        | ---      |
| Silver      | ppm | ASTM D5185m | >3         | <b>0</b>     | 0        | ---      |
| Aluminum    | ppm | ASTM D5185m | >20        | <b>5</b>     | ▲ 33     | ---      |
| Lead        | ppm | ASTM D5185m | >40        | <b>3</b>     | 0        | ---      |
| Copper      | ppm | ASTM D5185m | >330       | <b>&lt;1</b> | 5        | ---      |
| Tin         | ppm | ASTM D5185m | >15        | <b>&lt;1</b> | <1       | ---      |
| Vanadium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | ---      |
| Cadmium     | ppm | ASTM D5185m |            | <b>0</b>     | 0        | ---      |

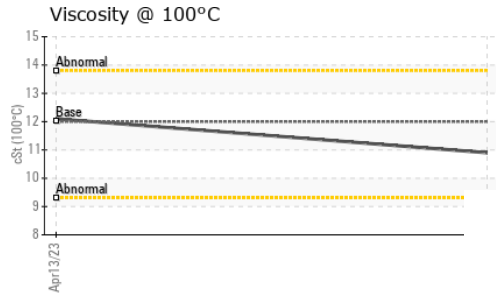
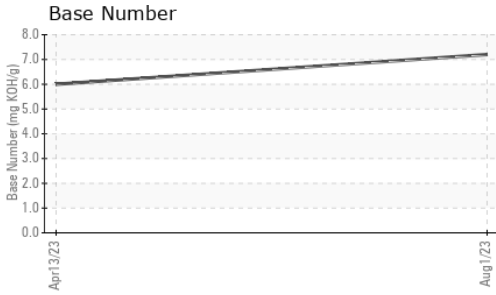
| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m | 2          | <b>2</b>     | 8        | ---      |
| Barium     | ppm | ASTM D5185m | 0          | <b>0</b>     | 0        | ---      |
| Molybdenum | ppm | ASTM D5185m | 50         | <b>57</b>    | 64       | ---      |
| Manganese  | ppm | ASTM D5185m | 0          | <b>&lt;1</b> | <1       | ---      |
| Magnesium  | ppm | ASTM D5185m | 950        | <b>925</b>   | 926      | ---      |
| Calcium    | ppm | ASTM D5185m | 1050       | <b>1176</b>  | 1255     | ---      |
| Phosphorus | ppm | ASTM D5185m | 995        | <b>1025</b>  | 1071     | ---      |
| Zinc       | ppm | ASTM D5185m | 1180       | <b>1249</b>  | 1352     | ---      |
| Sulfur     | ppm | ASTM D5185m | 2600       | <b>3417</b>  | 3344     | ---      |

| CONTAMINANTS |     | method      | limit/base | current  | history1 | history2 |
|--------------|-----|-------------|------------|----------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >25        | <b>4</b> | 5        | ---      |
| Sodium       | ppm | ASTM D5185m |            | <b>2</b> | 3        | ---      |
| Potassium    | ppm | ASTM D5185m | >20        | <b>8</b> | 21       | ---      |

| INFRA-RED |          | method      | limit/base | current     | history1 | history2 |
|-----------|----------|-------------|------------|-------------|----------|----------|
| Soot %    | %        | *ASTM D7844 | >3         | <b>0.3</b>  | 1        | ---      |
| Nitration | Abs/cm   | *ASTM D7624 | >20        | <b>8.3</b>  | 10.4     | ---      |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30        | <b>19.2</b> | 23.7     | ---      |

| FLUID DEGRADATION |          | method      | limit/base | current     | history1 | history2 |
|-------------------|----------|-------------|------------|-------------|----------|----------|
| Oxidation         | Abs/.1mm | *ASTM D7414 | >25        | <b>15.3</b> | 19.8     | ---      |
| Base Number (BN)  | mg KOH/g | ASTM D2896  |            | <b>7.2</b>  | 6.0      | ---      |

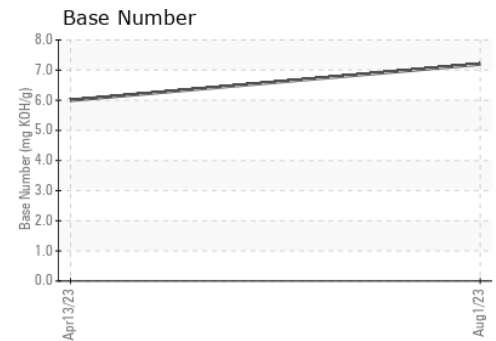
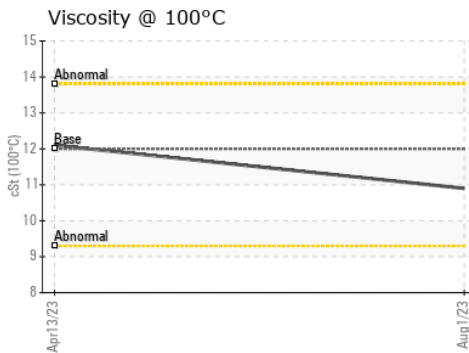
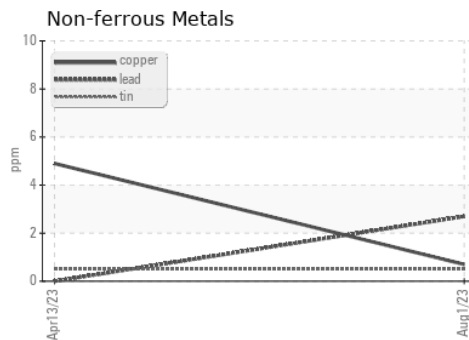
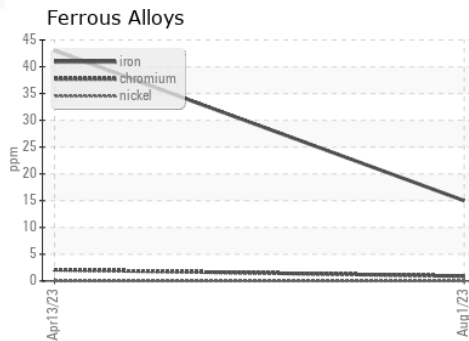
# OIL ANALYSIS REPORT



| 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>10.9</b> | 12.1     | --- |

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0093566  
**Lab Number** : 05931421  
**Unique Number** : 10616692  
**Test Package** : FLEET

**Transervice - Shop 1365 - Berkeley-Nazareth**  
 6813 Chrisphalt Drive  
 Bath Borough, PA  
 US 18014  
 Contact: Stephen Mackes  
 smackes@transervice.com  
 T: (610)837-8103  
 F: (610)837-8105

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)