

# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**


Area  
**(AU763S) Supermarket**  
 Machine Id  
**FREIGHTLINER 107A8821**  
 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>PCA0099836</b>  | ---      | ---      |
| Sample Date        | Client Info     |        |            | <b>02 Aug 2023</b> | ---      | ---      |
| Machine Age        | mls Client Info |        |            | <b>202849</b>      | ---      | ---      |
| Oil Age            | mls Client Info |        |            | <b>13689</b>       | ---      | ---      |
| Oil Changed        | Client Info     |        |            | <b>Not 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 | >80        | <b>13</b>    | ---      | ---      |
| Chromium    | ppm | ASTM D5185m | >5         | <b>1</b>     | ---      | ---      |
| Nickel      | ppm | ASTM D5185m | >2         | <b>0</b>     | ---      | ---      |
| Titanium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | ---      | ---      |
| Silver      | ppm | ASTM D5185m | >3         | <b>&lt;1</b> | ---      | ---      |
| Aluminum    | ppm | ASTM D5185m | >30        | <b>6</b>     | ---      | ---      |
| Lead        | ppm | ASTM D5185m | >30        | <b>0</b>     | ---      | ---      |
| Copper      | ppm | ASTM D5185m | >150       | <b>6</b>     | ---      | ---      |
| Tin         | ppm | ASTM D5185m | >5         | <b>&lt;1</b> | ---      | ---      |
| Vanadium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | ---      | ---      |
| Cadmium     | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |

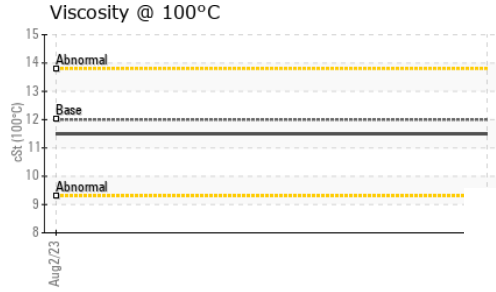
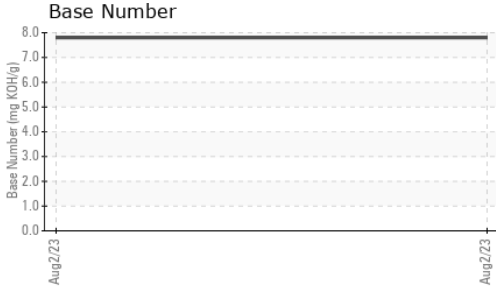
| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m | 2          | <b>4</b>     | ---      | ---      |
| Barium     | ppm | ASTM D5185m | 0          | <b>0</b>     | ---      | ---      |
| Molybdenum | ppm | ASTM D5185m | 50         | <b>65</b>    | ---      | ---      |
| Manganese  | ppm | ASTM D5185m | 0          | <b>&lt;1</b> | ---      | ---      |
| Magnesium  | ppm | ASTM D5185m | 950        | <b>938</b>   | ---      | ---      |
| Calcium    | ppm | ASTM D5185m | 1050       | <b>1126</b>  | ---      | ---      |
| Phosphorus | ppm | ASTM D5185m | 995        | <b>969</b>   | ---      | ---      |
| Zinc       | ppm | ASTM D5185m | 1180       | <b>1224</b>  | ---      | ---      |
| Sulfur     | ppm | ASTM D5185m | 2600       | <b>3275</b>  | ---      | ---      |

| CONTAMINANTS |     | method      | limit/base | current  | history1 | history2 |
|--------------|-----|-------------|------------|----------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >20        | <b>4</b> | ---      | ---      |
| Sodium       | ppm | ASTM D5185m |            | <b>2</b> | ---      | ---      |
| Potassium    | ppm | ASTM D5185m | >20        | <b>6</b> | ---      | ---      |

| INFRA-RED |          | method      | limit/base | current     | history1 | history2 |
|-----------|----------|-------------|------------|-------------|----------|----------|
| Soot %    | %        | *ASTM D7844 | >3         | <b>0.6</b>  | ---      | ---      |
| Nitration | Abs/cm   | *ASTM D7624 | >20        | <b>8.2</b>  | ---      | ---      |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30        | <b>19.7</b> | ---      | ---      |

| FLUID DEGRADATION |          | method      | limit/base | current     | history1 | history2 |
|-------------------|----------|-------------|------------|-------------|----------|----------|
| Oxidation         | Abs/.1mm | *ASTM D7414 | >25        | <b>15.3</b> | ---      | ---      |
| Base Number (BN)  | mg KOH/g | ASTM D2896  |            | <b>7.8</b>  | ---      | ---      |

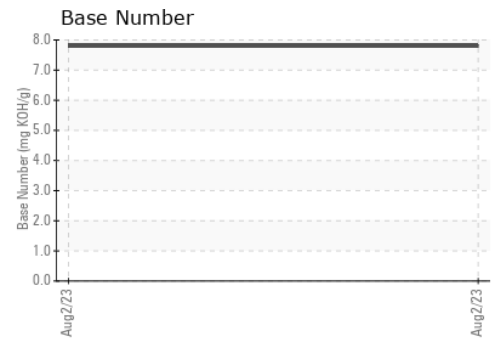
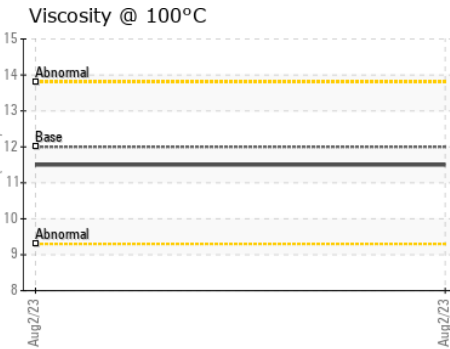
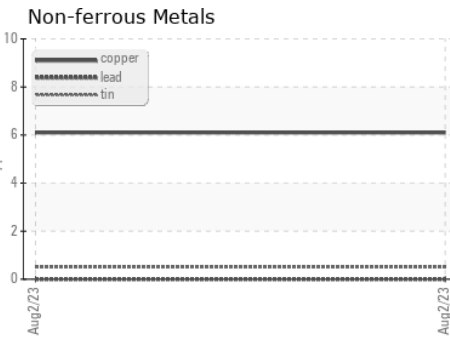
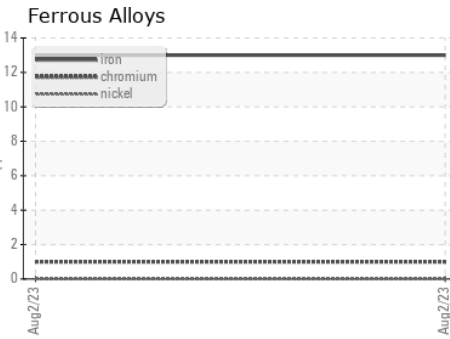
# OIL ANALYSIS REPORT



| 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  | 12.00   | <b>11.5</b> | ---      | --- |

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0099836 **Received** : 18 Aug 2023  
**Lab Number** : **05927981** **Diagnosed** : 20 Aug 2023  
**Unique Number** : 10607928 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**Transervice - Shop 1071 - Supermarket-Dayton**  
 60 A Tower Road  
 Dayton, NJ  
 US 08810  
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 bquinn@transervice.com  
 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)