

## **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL

### Machine Id 111044

Component Diesel Engine

PETRO CANADA DURON SHP 10W30 (--- QTS)

#### 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.

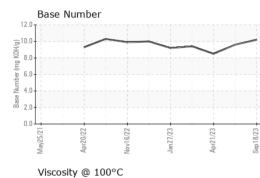
#### Fluid Condition

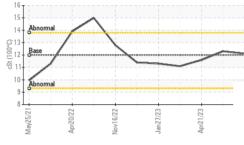
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| TS)              |          |             |            |             |             |             |
|------------------|----------|-------------|------------|-------------|-------------|-------------|
| SAMPLE INFOR     | MATION   | method      | limit/base | current     | history1    | history2    |
| Sample Number    |          | Client Info |            | PCA0105787  | PCA0100912  | PCA0097742  |
| Sample Date      |          | Client Info |            | 18 Sep 2023 | 13 Aug 2023 | 21 Apr 2023 |
| Machine Age      | mls      | Client Info |            | 132602      | 125914      | 100834      |
| Oil Age          | mls      | Client Info |            | 6690        | 0           | 0           |
| Oil Changed      | 1110     | Client Info |            | Changed     | Changed     | Changed     |
| Sample Status    |          |             |            | NORMAL      | NORMAL      | NORMAL      |
| CONTAMINAT       | ΓΙΟΝ     | method      | limit/base | current     | history1    | history2    |
| Fuel             |          | WC Method   | >5         | <1.0        | <1.0        | <1.0        |
| Glycol           |          | WC Method   | 20         | NEG         | NEG         | NEG         |
| WEAR METAL       | \$       |             | limit/base |             |             |             |
|                  |          | method      |            | current     | history1    | history2    |
| lron             | ppm      | ASTM D5185m |            | 22          | 32          | 19          |
| Chromium         | ppm      | ASTM D5185m |            | <1          | <1          | <1          |
| Nickel           | ppm      | ASTM D5185m | >4         | 0           | 0           | 0           |
| Titanium         | ppm      | ASTM D5185m |            | 0           | <1          | 0           |
| Silver           | ppm      | ASTM D5185m |            | 0           | 0           | 0           |
| Aluminum         | ppm      | ASTM D5185m | >20        | 2           | 3           | <1          |
| Lead             | ppm      | ASTM D5185m | >40        | <1          | 1           | 0           |
| Copper           | ppm      | ASTM D5185m | >330       | 1           | 3           | 7           |
| Tin              | ppm      | ASTM D5185m | >15        | 0           | 1           | 0           |
| Vanadium         | ppm      | ASTM D5185m |            | 0           | <1          | 0           |
| Cadmium          | ppm      | ASTM D5185m |            | 0           | 0           | 0           |
| ADDITIVES        |          | method      | limit/base | current     | history1    | history2    |
| Boron            | ppm      | ASTM D5185m | 2          | 4           | 7           | 16          |
| Barium           | ppm      | ASTM D5185m | 0          | 0           | <1          | 0           |
| Molybdenum       | ppm      | ASTM D5185m | 50         | 60          | 67          | 67          |
| Manganese        | ppm      | ASTM D5185m | 0          | 0           | 1           | <1          |
| Magnesium        | ppm      | ASTM D5185m | 950        | 864         | 957         | 924         |
| Calcium          | ppm      | ASTM D5185m | 1050       | 1176        | 1302        | 1111        |
| Phosphorus       | ppm      | ASTM D5185m | 995        | 1007        | 1095        | 1040        |
| Zinc             | ppm      | ASTM D5185m | 1180       | 1239        | 1353        | 1265        |
| Sulfur           | ppm      | ASTM D5185m | 2600       | 3149        | 3811        | 3647        |
| CONTAMINAN       | NTS      | method      | limit/base | current     | history1    | history2    |
| Silicon          | ppm      | ASTM D5185m | >25        | 4           | 4           | 5           |
| Sodium           | ppm      | ASTM D5185m |            | 0           | 3           | <1          |
| Potassium        | ppm      | ASTM D5185m | >20        | 2           | 2           | 0           |
| INFRA-RED        |          | method      | limit/base | current     | history1    | history2    |
| Soot %           | %        | *ASTM D7844 | >3         | 1.8         | 2           | 1.2         |
| Nitration        | Abs/cm   | *ASTM D7624 | >20        | 9.0         | 9.9         | 7.8         |
| Sulfation        | Abs/.1mm | *ASTM D7415 | >30        | 21.3        | 21.6        | 18.3        |
| FLUID DEGRA      | DATION   | method      | limit/base | current     | history1    | history2    |
| Oxidation        | Abs/.1mm | *ASTM D7414 | >25        | 14.8        | 15.3        | 14.0        |
| Base Number (BN) | mg KOH/g | ASTM D2896  |            |             | 9.6         | 8.5         |



# **OIL ANALYSIS REPORT**







Certificate L2367

Laboratory

Sample No.

Lab Number