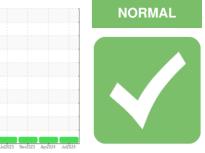


# **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

### **211771** Component **Diesel Engine** Fluid **PETRO CANADA DURON SHP 10W30 (--- 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

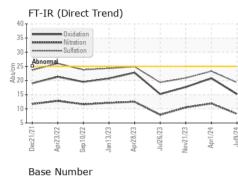
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

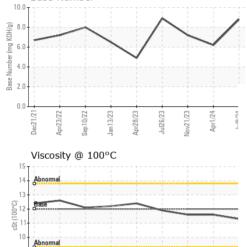
| SAMPLE INFORM    | MATION   | method      | limit/base | current     | history1    | history2    |
|------------------|----------|-------------|------------|-------------|-------------|-------------|
| Sample Number    |          | Client Info |            | PCA0128944  | PCA0120634  | PCA0113374  |
| Sample Date      |          | Client Info |            | 09 Jul 2024 | 01 Apr 2024 | 21 Nov 2023 |
| Machine Age      | mls      | Client Info |            | 115336      | 0           | 96896       |
| Oil Age          | mls      | Client Info |            | 0           | 0           | 0           |
| Oil Changed      |          | Client Info |            | Changed     | N/A         | Not Changd  |
| Sample Status    |          |             |            | NORMAL      | NORMAL      | NORMAL      |
| CONTAMINAT       | ION      | method      | limit/base | current     | history1    | history2    |
| Fuel             |          | WC Method   | >5         | <1.0        | <1.0        | <1.0        |
| Water            |          | WC Method   | >0.2       | NEG         | NEG         | NEG         |
| Glycol           |          | WC Method   |            | NEG         | NEG         | NEG         |
| WEAR METAL       | S        | method      | limit/base | current     | history1    | history2    |
| Iron             | ppm      | ASTM D5185m | >100       | 36          | 50          | 31          |
| Chromium         | ppm      | ASTM D5185m | >20        | 1           | 2           | 1           |
| Nickel           | ppm      | ASTM D5185m | >4         | 0           | <1          | <1          |
| Titanium         | ppm      | ASTM D5185m |            | <1          | 0           | 0           |
| Silver           | ppm      | ASTM D5185m | >3         | 0           | 0           | 0           |
| Aluminum         | ppm      | ASTM D5185m | >20        | 7           | 14          | 11          |
| Lead             | ppm      | ASTM D5185m | >40        | 0           | 0           | 0           |
| Copper           | ppm      | ASTM D5185m | >330       | 1           | 13          | 4           |
| Tin              | ppm      | ASTM D5185m | >15        | 0           | <1          | <1          |
| 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          | 3           | 6           | 9           |
| Barium           | ppm      | ASTM D5185m | 0          | 0           | 0           | 0           |
| Molybdenum       | ppm      | ASTM D5185m | 50         | 64          | 66          | 63          |
| Manganese        | ppm      | ASTM D5185m | 0          | <1          | <1          | <1          |
| Magnesium        | ppm      | ASTM D5185m | 950        | 1041        | 954         | 907         |
| Calcium          | ppm      | ASTM D5185m | 1050       | 1169        | 1250        | 1135        |
| Phosphorus       | ppm      | ASTM D5185m | 995        | 1093        | 997         | 1046        |
| Zinc             | ppm      | ASTM D5185m | 1180       | 1300        | 1203        | 1289        |
| Sulfur           | ppm      | ASTM D5185m | 2600       | 3795        | 3530        | 3110        |
| CONTAMINAN       | TS       | method      | limit/base | current     | history1    | history2    |
| Silicon          | ppm      | ASTM D5185m | >25        | 5           | 5           | 5           |
| Sodium           | ppm      | ASTM D5185m |            | 1           | 2           | 2           |
| Potassium        | ppm      | ASTM D5185m | >20        | 5           | 15          | 10          |
| INFRA-RED        |          | method      | limit/base | current     | history1    | history2    |
| Soot %           | %        | *ASTM D7844 | >3         | 0.4         | 0.8         | 0.6         |
| Nitration        | Abs/cm   | *ASTM D7624 | >20        | 8.2         | 11.9        | 10.5        |
| Sulfation        | Abs/.1mm | *ASTM D7415 | >30        | 19.3        | 23.3        | 20.9        |
| FLUID DEGRAD     | DATION   | method      | limit/base | current     | history1    | history2    |
| Oxidation        | Abs/.1mm | *ASTM D7414 | >25        | 15.2        | 20.8        | 17.7        |
| Base Number (BN) | mg KOH/g | ASTM D2896  |            | 8.8         | 6.2         | 7.2         |
|                  |          |             |            |             |             |             |



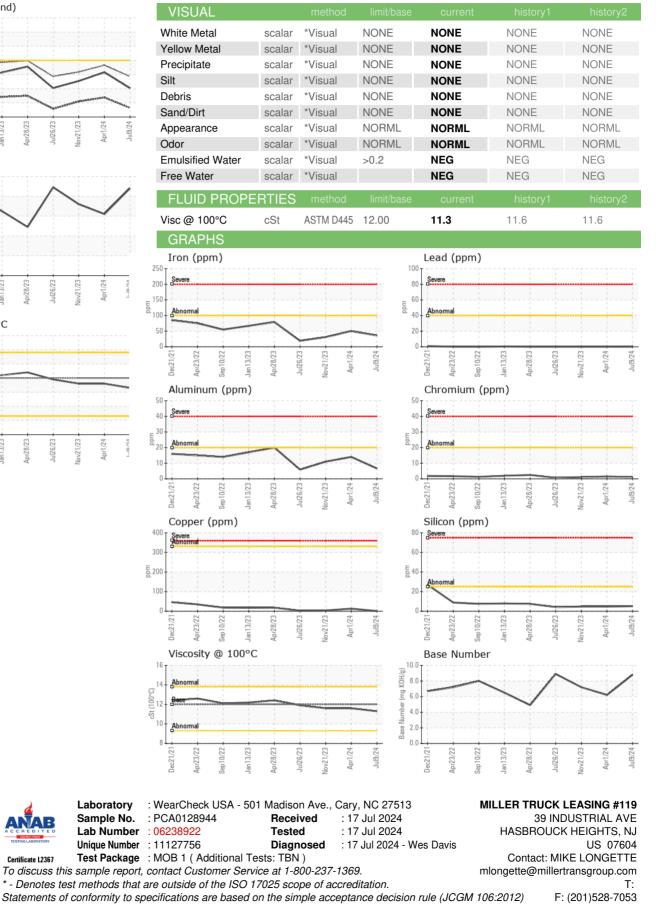
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# **OIL ANALYSIS REPORT**





08/23



Report Id: MILRUT [WUSCAR] 06238922 (Generated: 07/17/2024 16:31:59) Rev: 1

Certificate 12367

Laboratory

Sample No.

pr1/24

Contact/Location: MIKE LONGETTE - MILRUT

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