

# **OIL ANALYSIS REPORT**

# Sample Rating Trend

NORMAL



# Machine Id **130180M**

Component

**Diesel Engine** 

PETRO CANADA DURON SHP 10W30 (--- 0

### DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Metal levels are typical for a new component breaking in.

### Contamination

There is no indication of any contamination in the

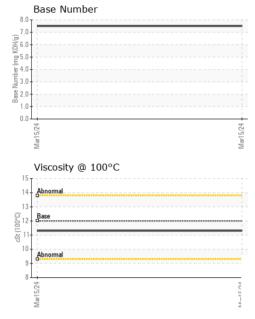
### **Fluid Condition**

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

| QTS)             |          |             |            | Mar2024     |          |          |
|------------------|----------|-------------|------------|-------------|----------|----------|
| SAMPLE INFOR     | RMATION  | method      | limit/base | current     | history1 | history2 |
| Sample Number    |          | Client Info |            | PCA0116907  |          |          |
| Sample Date      |          | Client Info |            | 15 Mar 2024 |          |          |
| Machine Age      | mls      | Client Info |            | 39429       |          |          |
| Oil Age          | mls      | Client Info |            | 13650       |          |          |
| Oil Changed      |          | Client Info |            | Changed     |          |          |
| Sample Status    |          |             |            | NORMAL      |          |          |
| CONTAMINAT       | ΓΙΟΝ     | method      | limit/base | current     | history1 | history2 |
| Fuel             |          | WC Method   | >5         | <1.0        |          |          |
| Water            |          | WC Method   | >0.2       | NEG         |          |          |
| Glycol           |          | WC Method   |            | NEG         |          |          |
| WEAR METAL       | _S       | method      | limit/base | current     | history1 | history2 |
| Iron             | ppm      | ASTM D5185m | >100       | 54          |          |          |
| Chromium         | ppm      | ASTM D5185m | >20        | 1           |          |          |
| Nickel           | ppm      | ASTM D5185m | >4         | 0           |          |          |
| Titanium         | ppm      | ASTM D5185m |            | <1          |          |          |
| Silver           | ppm      | ASTM D5185m | >3         | <1          |          |          |
| Aluminum         | ppm      | ASTM D5185m | >20        | 7           |          |          |
| Lead             | ppm      | ASTM D5185m | >40        | 2           |          |          |
| Copper           | ppm      | ASTM D5185m | >330       | 111         |          |          |
| Tin              | ppm      | ASTM D5185m | >15        | 3           |          |          |
| Vanadium         | ppm      | ASTM D5185m |            | <1          |          |          |
| Cadmium          | ppm      | ASTM D5185m |            | 0           |          |          |
| ADDITIVES        |          | method      | limit/base | current     | history1 | history2 |
| Boron            | ppm      | ASTM D5185m | 2          | 6           |          |          |
| Barium           | ppm      | ASTM D5185m | 0          | 3           |          |          |
| Molybdenum       | ppm      | ASTM D5185m | 50         | 59          |          |          |
| Manganese        | ppm      | ASTM D5185m | 0          | 1           |          |          |
| Magnesium        | ppm      | ASTM D5185m | 950        | 835         |          |          |
| Calcium          | ppm      | ASTM D5185m | 1050       | 1239        |          |          |
| Phosphorus       | ppm      | ASTM D5185m | 995        | 1062        |          |          |
| Zinc             | ppm      | ASTM D5185m | 1180       | 1270        |          |          |
| Sulfur           | ppm      | ASTM D5185m | 2600       | 2930        |          |          |
| CONTAMINAN       | NTS      | method      | limit/base | current     | history1 | history2 |
| Silicon          | ppm      | ASTM D5185m | >25        | 11          |          |          |
| Sodium           | ppm      | ASTM D5185m |            | 2           |          |          |
| Potassium        | ppm      | ASTM D5185m | >20        | 7           |          |          |
| INFRA-RED        |          | method      | limit/base | current     | history1 | history2 |
| Soot %           | %        | *ASTM D7844 | >3         | 0.9         |          |          |
| Nitration        | Abs/cm   | *ASTM D7624 | >20        | 10.5        |          |          |
| Sulfation        | Abs/.1mm | *ASTM D7415 | >30        | 21.3        |          |          |
| FLUID DEGRA      | DATION   | method      | limit/base | current     | history1 | history2 |
| Oxidation        | Abs/.1mm | *ASTM D7414 | >25        | 18.7        |          |          |
| Base Number (BN) | mg KOH/g | ASTM D2896  |            | 7.5         |          |          |



## **OIL ANALYSIS REPORT**





|   |   | Mar15/24 | Lead (ppm)  Severe  Abnormal   |   |   |
|---|---|----------|--|---|---|
|   |   | 15/24    | Severe  Solution Severe  Abnormal  |   |   |
|   |   | 15/24    | 80 Severe 60 40 Abnormal 20 0  |   |   |
| *************************************** |   | 15/24    | 60 Abnomal 20  |   | -   |
|   | *************************************** | 15/24    | 20   |   |   |
|   |   | 15/24    | 0  |   |   |
|   |   | 15/24    | and the second s |   |   |
|   |   |          | LO   |   | 5/24  |
|   |   | Mar      | Mar15/24   |   | Mar15/24  |
|   |   |          | Chromium (ppi  | m)  |   |
|   |   |          | Severe   |   |   |
|   |   |          | E 30   |   |   |
|   | *************************************** |          | Abnormal   |   |   |
|   |   |          | 10   |   |   |
|   |   | 5/24     | and the second s |   | 5/24  |
|   |   | Mar1     |  |   | Mar15/24  |
|   |   |          |  |   |   |
|   |   |          |  |   |   |
|   |   |          |  |   |   |
|   |   |          | Abnormal   |   |   |
|   |   |          |  |   |   |
|   |   | 5/24     |  |   | Mar15/24 -  |
|   |   | Mar      |  |   | Mar   |
| C                                       |   |          | 80   |   |   |
| ,,,,,,,,,,,                             |   | 0000     | B/H <sub>0</sub> .0  |   |   |
|   | *************************************** |          | Bu 4.0   |   |   |
|   |   |          | 2.0 Via  |   |   |
|   |   |          | 80.0   |   |   |
|   |   | 15/24    |  |   | Mar15/24 -  |
|   |   | Mar      | Mar  |   | Mar   |
|   | 01 Madisc                               |          | Mar15/24   | Severe  40  40  40  40  40  40  40  40  40  4 | Silicon (ppm)  Silicon (ppm)  Severe  Abnormal  40  Abnormal  FZS1 IzeW  Silicon (ppm)  Severe  60  Wild 40  FZS1 IzeW  Base Number  (b) HO) fell Jaquini, adjust 4.0  10  10  10  10  10  10  10  10  10 |



Laboratory Sample No.

Lab Number : 06124549

Unique Number : 10938700

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0116907 Received **Tested** 

Diagnosed Test Package : MOB 1 ( Additional Tests: TBN )

: 21 Mar 2024 : 21 Mar 2024

: 21 Mar 2024 - Wes Davis

Contact: ED DAVIS edavis@millertransgroup.com T: (856)214-3521

63 REPAUPO STATION ROAD

LOGAN TOWNSHIP, NJ

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)

Contact/Location: ED DAVIS - MILLOG

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US 08085