

## **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id 798063

Component Diesel Engine Fluid

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

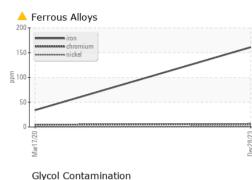
DIAGNOSIS

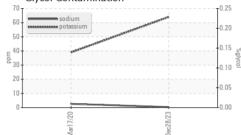
|                  |                |             | Mar2020    | Dec2023      |             |          |
|------------------|----------------|-------------|------------|--------------|-------------|----------|
| SAMPLE INFORM    | <b>/IATION</b> | method      | limit/base | current      | history1    | history2 |
| Sample Number    |                | Client Info |            | PCA0115183   | PCA04936381 |          |
| Sample Date      |                | Client Info |            | 28 Dec 2023  | 17 Mar 2020 |          |
| Machine Age      | mls            | Client Info |            | 0            | 0           |          |
| Oil Age          | mls            | Client Info |            | 0            | 0           |          |
| Oil Changed      |                | Client Info |            | N/A          | N/A         |          |
| Sample Status    |                |             |            | ABNORMAL     | NORMAL      |          |
| CONTAMINATI      | ON             | method      | limit/base | current      | history1    | history2 |
| Fuel             |                | WC Method   | >5         | <1.0         | <1.0        |          |
| Water            |                | WC Method   | >0.2       | NEG          | NEG         |          |
| Glycol           |                | WC Method   |            | NEG          | NEG         |          |
| WEAR METALS      | S              | method      | limit/base | current      | history1    | history2 |
| Iron             | ppm            | ASTM D5185m | >100       | <b>4</b> 161 | 34          |          |
| Chromium         | ppm            | ASTM D5185m | >20        | 6            | 4           |          |
| Nickel           | ppm            | ASTM D5185m | >4         | <1           | <1          |          |
| Titanium         | ppm            | ASTM D5185m |            | 3            | <1          |          |
| Silver           | ppm            | ASTM D5185m | >3         | 0            | <1          |          |
| Aluminum         | ppm            | ASTM D5185m | >20        | 51           | 18          |          |
| Lead             | ppm            | ASTM D5185m | >40        | 0            | <1          |          |
| Copper           | ppm            | ASTM D5185m | >330       | 14           | 36          |          |
| Tin              | ppm            | ASTM D5185m | >15        | <1           | 0           |          |
| Antimony         | ppm            | ASTM D5185m |            |              | 4           |          |
| Vanadium         | ppm            | ASTM D5185m |            | 0            | 0           |          |
| Cadmium          | ppm            | ASTM D5185m |            | 0            | 0           |          |
| ADDITIVES        |                | method      | limit/base | current      | history1    | history2 |
| Boron            | ppm            | ASTM D5185m | 2          | 4            | 4           |          |
| Barium           | ppm            | ASTM D5185m | 0          | 10           | 0           |          |
| Molybdenum       | ppm            | ASTM D5185m | 50         | 59           | 63          |          |
| Manganese        | ppm            | ASTM D5185m | 0          | 2            | <1          |          |
| Magnesium        | ppm            | ASTM D5185m | 950        | 865          | 1078        |          |
| Calcium          | ppm            | ASTM D5185m | 1050       | 1143         | 1270        |          |
| Phosphorus       | ppm            | ASTM D5185m | 995        | 1053         | 1087        |          |
| Zinc             | ppm            | ASTM D5185m | 1180       | 1199         | 1219        |          |
| Sulfur           | ppm            | ASTM D5185m | 2600       | 2797         | 2548        |          |
| CONTAMINAN       | TS             | method      | limit/base | current      | history1    | history2 |
| Silicon          | ppm            | ASTM D5185m | >25        | 8            | 4           |          |
| Sodium           | ppm            | ASTM D5185m |            | <1           | 3           |          |
| Potassium        | ppm            | ASTM D5185m | >20        | 64           | 39          |          |
| INFRA-RED        |                | method      | limit/base | current      | history1    | history2 |
| Soot %           | %              | *ASTM D7844 | >3         | 1.4          | 0.4         |          |
| Nitration        | Abs/cm         | *ASTM D7624 | >20        | 11.8         | 7.6         |          |
| Sulfation        | Abs/.1mm       | *ASTM D7415 | >30        | 26.1         | 19.2        |          |
| FLUID DEGRAD     | ATION          | method      | limit/base | current      | history1    | history2 |
| Oxidation        | Abs/.1mm       | *ASTM D7414 | >25        | 20.7         | 14.7        |          |
| Base Number (BN) | mg KOH/g       | ASTM D2896  |            | 5.3          |             |          |
|                  |                |             |            |              |             |          |

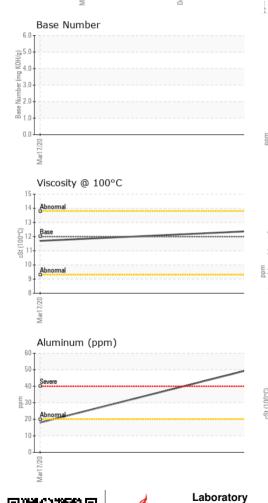
Contact/Location: ALDO LAIN - MILRUT

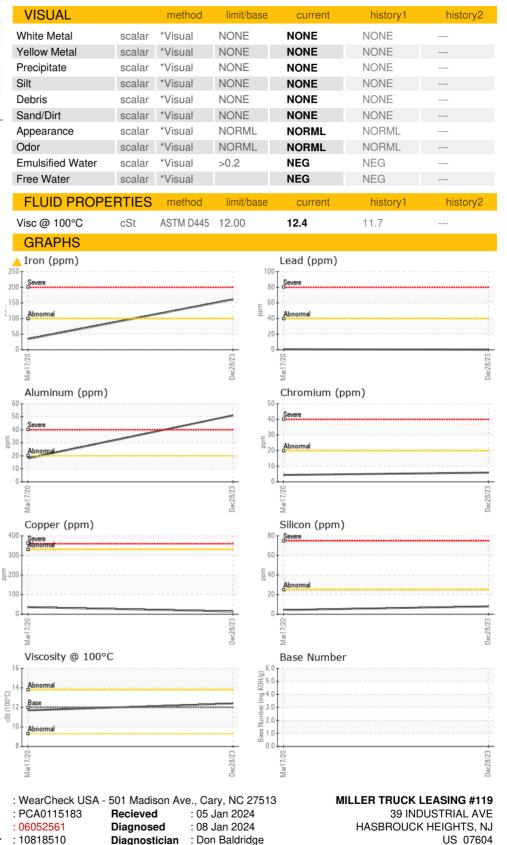


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To discuss this sample report, contact Customer Service at 1-800-237-1369. \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Test Package : MOB 1 (Additional Tests: TBN)

Certificate L2367

Sample No.

Lab Number

Unique Number

Contact/Location: ALDO LAIN - MILRUT

Contact: ALDO LAIN

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