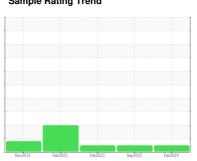


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



738606

Component

Diesel Engine

PETRO CANADA DURON SHP 10W30 (---

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

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.

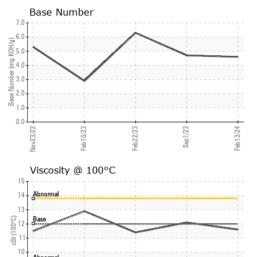
| GAL) | | Nov2022 | Feb 2023 | Feb2023 Sep2023 | Feb 2024 | |
|---------------------|-----------------|----------------------------|--------------|-----------------|--------------|--------------|
| SAMPLE INFOR | RMATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | PCA0114566 | PCA0105300 | PCA0093248 |
| Sample Date | | Client Info | | 13 Feb 2024 | 01 Sep 2023 | 22 Feb 2023 |
| Machine Age | mls | Client Info | | 248135 | 191794 | 40502 |
| Oil Age | mls | Client Info | | 0 | 191794 | 40502 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |
| CONTAMINA | TION | 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 META | LS | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >100 | 56 | 93 | 66 |
| Chromium | ppm | ASTM D5185m | >20 | 2 | 4 | 3 |
| Nickel | ppm | ASTM D5185m | >4 | <1 | <1 | <1 |
| Titanium | ppm | ASTM D5185m | | 2 | 9 | 26 |
| Silver | ppm | ASTM D5185m | >3 | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | | 8 | 17 | 20 |
| Lead | ppm | ASTM D5185m | >40 | 0 | <1 | 0 |
| Copper | ppm | ASTM D5185m | | 9 | 29 | 60 |
| Tin | ppm | | >15 | 1 | 2 | 2 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | <1 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | | 2 | 3 | 3 | 18 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 50 | 60 | 62 | 39 |
| Manganese | ppm | ASTM D5185m | | 1 | 2 | 2 |
| Magnesium | ppm | ASTM D5185m | 950 | 959 | 921 | 635 |
| Calcium | ppm | ASTM D5185m | | 1210 | 1400 | 1508 |
| Phosphorus | ppm | ASTM D5185m | 995 | 1163 | 1082 | 903 |
| Zinc Sulfur | ppm | ASTM D5185m ASTM D5185m | 1180 2600 | 1399 2662 | 1367 2965 | 1122 2507 |
| CONTAMINA | | method | limit/base | current | history1 | history2 |
| Silicon | | ASTM D5185m | | 7 | 9 | 8 |
| Sodium | ppm | ASTM D5185m | >25 | 1 | 2 | <1 |
| Potassium | ppm | ASTM D5185m | >20 | 10 | 32 | 50 |
| INFRA-RED | | method | limit/base | current | history1 | history2 |
| Soot % | % | *ASTM D7844 | >3 | 1.5 | 1.8 | 1.3 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 13.3 | 14.6 | 12.0 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 26.1 | 27.3 | 25.0 |
| FLUID DEGRA | ADATIO <u>N</u> | method | limit/base | current | history1 | history2 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 26.3 | 27.2 | 24.7 |
| Base Number (BN) | | ASTM D2896 | , | 4.6 | 4.7 | 6.3 |
| 2400 Harribor (DIV) | mg romg | | | 7.0 | 1.7 | 0.0 |



OIL ANALYSIS REPORT

cSt

Visc @ 100°C



| VISUAL | | method | limit/base | current | history1 | history2 |
|-------------------------|--------|---------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.2 | NEG | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |
| FLUID PROPE | RTIES | method | limit/base | current | history1 | history2 |

11.6

Base Number

(0,H0X)

Feb13/24

12.1

11.4

ASTM D445 12.00

| | 7.0 | | • | | | |
|----------------------|------------|-----------|--------------|-----------|-----------|---|
| GRAPHS | | | | | | |
| Iron (ppm) | | | Lead (ppm |) | | |
| Severe | | | Severe | | | |
| Abnormal | | E | 60 | | | |
| Abnormal | | | 40 + 0 | | | |
| | | | 20 | | | |
| Nov23/22 Feb10/23 | Feb22/23 | Feb13/24 | Nov23/22 | Feb 10/23 | Sep1/23 | |
| | <u>F</u> 8 | 逆 | _ | _ | Ö | |
| Aluminum (ppm) | | | Chromium 50 | (ppm) | | |
| | | | 40 Severe | | | |
| Severe | | | Abnormal | | | |
| Abnormal | | | 10- | | | |
| | 23 | 24+ | 22 | - 53 | 23- | |
| Nov23/22 Feb10/23 | Feb22/23 | Feb 13/24 | Nov23/22 | Feb 10/23 | Sep1/23 | |
| Copper (ppm) | | | Silicon (ppr | m) | | |
| Severe Abnormal | | | 80 - Severe | | | |
| | | | 60 | | | |
| | | | Abnormal | | | |
| | | | 20 | | | _ |
| Nov23/22 + | Feb22/23 + | Feb13/24 | Nov23/22 | Feb 22/23 | Sep1/23 - | |
| Nov. | Sei | 虚 | Nov. | E | Sel | |





Laboratory Sample No.

Lab Number : 06107120 Unique Number: 10910617

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0114566 Received : 04 Mar 2024 : 04 Mar 2024

Sep1/23

Tested Diagnosed : 06 Mar 2024 - Jonathan Hester

Test Package: MOB 1 (Additional Tests: TBN)

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.

Viscosity @ 100°C

MILLER TRUCK LEASING #118

2196 BENNETT ROAD PHILADELPHIA, PA US 19116

Sep1/23,

Contact: ROSTY VITER rviter@millertransgroup.com T: (215)552-9832

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (215)552-9892

Contact/Location: ROSTY VITER - MILPHINE