

OIL ANALYSIS REPORT

Sample Rating Trend





Component

Diesel Engine

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.

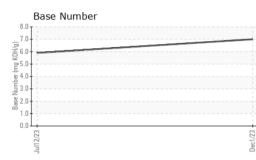
Fluid Condition

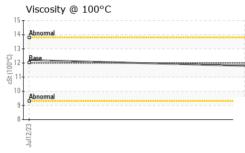
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

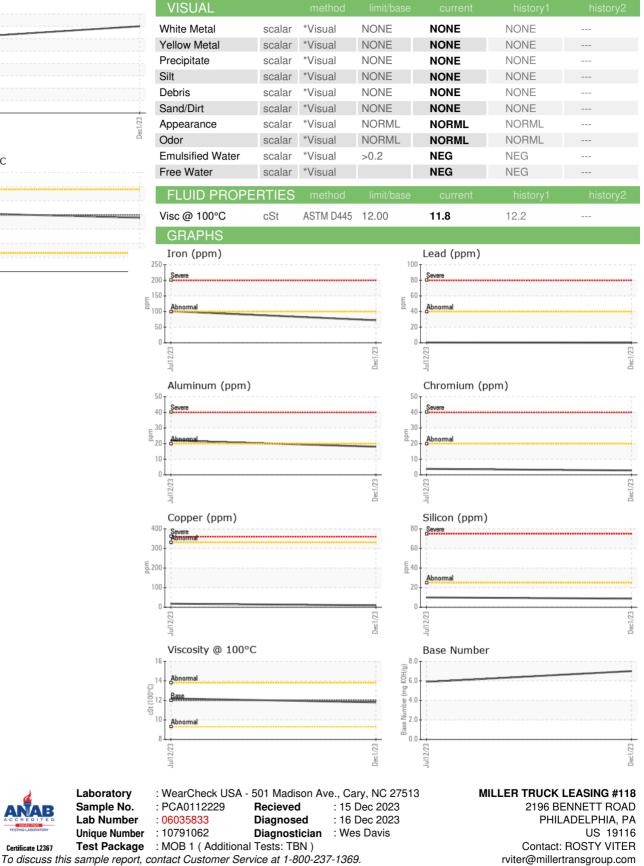
| AL) | | | Jul2023 | Dec2023 | | |
|------------------------|--------------------|----------------------------|-------------|--------------|--------------|-----------|
| SAMPLE INFOR | MATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | PCA0112229 | PCA0095742 | |
| Sample Date | | Client Info | | 01 Dec 2023 | 12 Jul 2023 | |
| Machine Age | mls | Client Info | | 120104 | 29653 | |
| Oil Age | mls | Client Info | | 40000 | 29653 | |
| Oil Changed | | Client Info | | Changed | Changed | |
| Sample Status | | | | NORMAL | NORMAL | |
| CONTAMINAT | ION | 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 METAL | .S | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >100 | 72 | 101 | |
| Chromium | ppm | ASTM D5185m | | 3 | 4 | |
| Nickel | ppm | ASTM D5185m | | 1 | 1 | |
| Titanium | ppm | ASTM D5185m | e 1 | 3 | 14 | |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | |
| Aluminum | ppm | ASTM D5185m | | 18 | 22 | |
| Lead | ppm | ASTM D5185m | | 0 | <1 | |
| Copper | ppm | ASTM D5185m | | 10 | 18 | |
| Tin | ppm | ASTM D5185m | >15 | 2 | 3 | |
| Vanadium | ppm | ASTM D5185m | 210 | <1 | <1 | |
| Cadmium | ppm | ASTM D5185m | | <1 | 0 | |
| ADDITIVES | pp | method | limit/base | current | history1 | history2 |
| Boron | nom | ASTM D5185m | 2 | 7 | 6 | |
| Barium | ppm ppm | ASTM D5185m | 0 | 12 | 0 | |
| | | ASTM D5185m | 50 | 61 | 58 | |
| Molybdenum | ppm | ASTM D5185m | 0 | 2 | 3 | |
| Manganese | ppm | | 950 | | 969 | |
| Magnesium Calcium | ppm | ASTM D5185m ASTM D5185m | 1050 | 940 1318 | 1593 | |
| Phosphorus | ppm | ASTM D5185m | 995 | 1023 | 1102 | |
| Zinc | ppm | ASTM D5185m | 995 1180 | 1023 | 1372 | |
| Sulfur | ppm ppm | ASTM D5185m | 2600 | 3136 | 3491 | |
| CONTAMINAN | | method | limit/base | current | history1 | history2 |
| | | | | | 10 | - Hotory2 |
| Silicon Sodium | ppm | ASTM D5185m ASTM D5185m | >25 | 9 2 | 8 | |
| Potassium | ppm ppm | ASTM D5185m | >20 | 2 32 | 28 | |
| INFRA-RED | le le | method | limit/base | current | history1 | history2 |
| | 0/ | | | | | |
| Soot % | % | *ASTM D7844 | >3 | 1.1 | 1.6 | |
| Nitration Sulfation | Abs/cm Abs/.1mm | *ASTM D7624 *ASTM D7415 | >20 >30 | 12.9 24.8 | 15.2 29.7 | |
| | | | | | | |
| FLUID DEGRA | | | limit/base | current | history1 | history2 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 23.1 | 26.9 | |
| Base Number (BN) | mg KOH/g | ASTM D2896 | | 7.0 | 5.9 | |



OIL ANALYSIS REPORT







* - 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)

Certificate L2367

Laboratory

Sample No.

Lab Number

T: (215)552-9832

F: (215)552-9892