

OIL ANALYSIS REPORT

Sample Rating Trend



FREIGHTLINER 503087 Component

Diesel Engine

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

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.

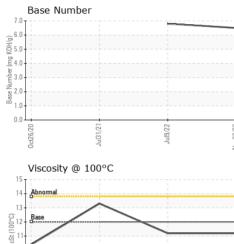
| SAMPLE INFORM | NATION | method | limit/base | current | history1 | history2 |
|------------------|----------|-------------|------------|-------------|-----------------|-------------|
| Sample Number | | Client Info | | PCA0098965 | PCA0070891 | PCA0055394 |
| Sample Date | | Client Info | | 22 Nov 2023 | 09 Jul 2022 | 31 Jul 2021 |
| Machine Age | mls | Client Info | | 143835 | 94447 | 60110 |
| Oil Age | mls | Client Info | | 0 | 34337 | 27408 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |
| CONTAMINATI | ON | method | limit/base | current | history1 | history2 |
| Fuel | | WC Method | >3.0 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | 0.0 |
| WEAR METALS | S | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >65 | 32 | 33 | 26 |
| Chromium | ppm | ASTM D5185m | >5 | 3 | 5 | 5 |
| Nickel | ppm | ASTM D5185m | >3 | <1 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | >5 | <1 | 0 | <1 |
| Silver | ppm | ASTM D5185m | >2 | <1 | <1 | <1 |
| Aluminum | ppm | ASTM D5185m | >35 | 26 | 32 | 33 |
| Lead | ppm | ASTM D5185m | >10 | 2 | <1 | <1 |
| Copper | ppm | ASTM D5185m | >180 | 22 | 47 | 62 |
| Tin | ppm | ASTM D5185m | >8 | 2 | 2 | 5 |
| Antimony | ppm | ASTM D5185m | >35 | | | 0 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | 2 | 4 | 5 | 7 |
| Barium | ppm | ASTM D5185m | 0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 50 | 58 | 66 | 64 |
| Manganese | ppm | ASTM D5185m | 0 | 1 | <1 | 1 |
| Magnesium | ppm | ASTM D5185m | 950 | 784 | 942 | 881 |
| Calcium | ppm | ASTM D5185m | 1050 | 1062 | 1202 | 1118 |
| Phosphorus | ppm | ASTM D5185m | 995 | 818 | 913 | 832 |
| Zinc | ppm | ASTM D5185m | 1180 | 1006 | 1229 | 1080 |
| Sulfur | ppm | ASTM D5185m | 2600 | 2574 | 2878 | 2046 |
| CONTAMINAN | TS | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >15 | 4 | 5 | 4 |
| Sodium | ppm | ASTM D5185m | | 4 | 0 | 2 |
| Potassium | ppm | ASTM D5185m | >20 | 36 | 51 | 61 |
| INFRA-RED | | method | limit/base | current | history1 | history2 |
| Soot % | % | *ASTM D7844 | >3 | 0.9 | 0.9 | 0.6 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 12.0 | 10.2 | 8.6 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 23.7 | 23.0 | 20.8 |
| FLUID DEGRAD | ATION | method | limit/base | current | history1 | history2 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 20.2 | 18.0 | 15.8 |
| Base Number (BN) | mg KOH/g | | | 6.5 | 6.8 | |
| :43:57) Boy: 1 | 0 | | | | cation: MIKE BC | |

Contact/Location: MIKE BOYER - MILPEN

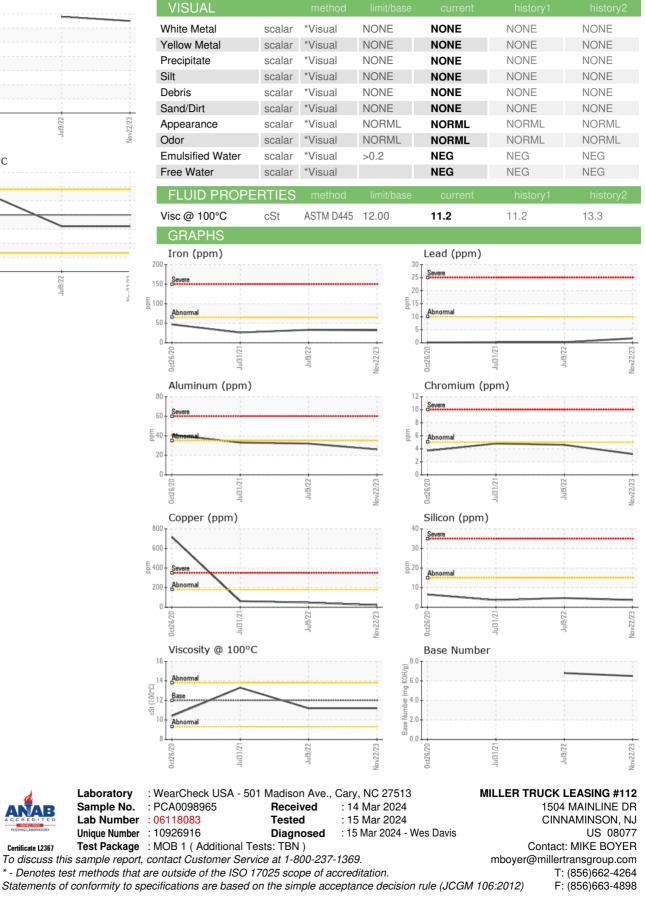


Abnorma

OIL ANALYSIS REPORT



Jul9/22



Certificate L2367

Contact/Location: MIKE BOYER - MILPEN